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BIIRDs. by. Thomas Pernant ${ }^{c}$


LONDON.
Printed for B.WHite
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1781
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ADVERTISEMENT.
HIS trifle was written in the year 1772, and prefented to Doctor Robert Ramsay, Profeffor of Natural Hiftory in Edinburgh, for the ufe of the clafs over which he prefided. He printed one impreffion in the following year; and then refigned to me the copy.

Death deprived the community of a worthy member, in the lofs of my friend, on December 15 th, 1778 . I fuffer the Dedication to remain in this edition, as a fmall monument to his memory; and of the efteem in which I held a gentleman, ever active in all good offices to

Downing,
Dec. 20th, 1780 .
THOMASPENNANT.

## T 0

## ROBERT RAMSAY, M.D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, A N D

PROFESSOR OF NATURAL HISTORY IN THE UNIVER SITY OF EDINBURGH.

DEAR SIR,

ITHINK myfelf happy in having an opportunity of giving you this mark of the fenfe I have of your fteady friendhip, from its origin, in 1769 , to the prefent moment. From the beginning, it has proved a regular feries of good offices: You never confidered me with the jealoufy of a Rival courting the fame Miftrefs; but, with uncommon generofity, promoted all my purfuits after Dame Nature, whether fhe retired to the depths of the Higbland Glens, or lurked amidft the intricate groups of the ftormy Hebrides. If, in my late expedition, fhe has granted me any favors (for fhe proved rather coy) the humbled me by faying, that I was indebted to you for them. So that I find myfelf bound to make public acknowlegements of advantages acquired by means of the clue you gave of arriving at the few I have obtained.

## D E D I C A T I O

Notwithetanding I own your power with the Lady on your fide of the $T_{\text {weed, }}$, yet I never can be induced to omit any opportunity of recommending myfelf to her good graces, and, with you, muft ever remain a warm admirer of her univerfal charms. But the following analy/is of one which captivates me moft, is now offered to you, with the hopes of meeting with your approbation, and that of the feveral votaries who depend on you for a more intimate acquaintance with her various beauties. Long may you enjoy health, and every happinefs, to perform fo agreeable a tafk: May you be fuccefsful in extending her empire: Good fortune attend you in each of her haunts, whether the affects the air, the woods, or the fields; whether, like an Oread, fhe treads jocund on the mifty mountain's top; or a Naiad, fporting in your rapid Atreams. Again, fuccefs attend you every where; and may none but Birds of good omen flutter round you.

Sis licet felix ubicunque mavis, Et memor noftri, mihi care, vivas :
Teque nec levus vetet ire Picus,
Nec vaga Cornix.

Downing,
JAN. I, $1773^{\circ}$
THOMAS PENNANT.

## PREFACE.

ORnithology is a fcience which treats of Birds; defcribes their form, external and internal; and teaches their œconomy and their ufes.

A BIRD is an animal covered with feathers; furnifhed with a bill; having two wings, and only two legs; with the faculty, except in very few inftances, of removing itfelf from place to place through the air.

## External Parts of B I R D S.

A Bird may be divided into Head, Body, and Limbs.

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Roftrum, or bill, is a hard horny fubftance, confifting of an upper and under part, extending from the head, and anfwering to the mandibles in quadrupeds. Its edges generally plain and fharp,
i like the edge of a knife, cultrated ${ }^{*}$, as the bills of Crows; but fometimes ferrated, as in the Toucan ; or jagged, as in the Gan-

- This and other terms are explained by figures in the British Zoolocy, vol, 1, tab, xv. A few terms are explained from the figure on the title.
net and fome Herons; or pectinated, as in the Duck; or dentisulated, as in the Mergansers; but always deftitute of real teeth immerfed in fockets.

The bafe in Falcons is covered with a naked fkin or Cere (Cera;) in fome birds with a carneous appendage, as the Turkey; or a callous, as the Curasso.

In birds of prey, the bill is hooked at the end, and fit for tearing: in Crows, ftrait and ftrong, for picking: in water-fowl, either long and pointed, for ftriking; or flender and blunt, for fearching in the mire ; or flat and broad, for gobbling. Its other ufes are for building nefts; feeding the young; climbing, as in Parвотя; or, laftly, as an inftrument of defence, or offence.

Nostrils.
(Nares) the nice inftruments of difcerning their food, are placed either in the middle of the upper mandible, or near the bafe, or at the bafe, as in Parrots; or behind the bafe, as in Toucans and Hornbills: but fome birds, as the Gannet, are deftitute of noftrils. The noftrils are generally naked, but fometimes covered with briftles reflected over them, as in Crows; or hid in the feathers, as in Parrots, \&cc.

The forepart of the head is called the Front (Capifrum;) thefummit (vertex) or the crown: the hind part, with the next joint of the neck (nucba) the nape: the fpace between the bill and the eyes, which in Herons, Grebes, \&cc. is naked (lora) the ftraps: the fpace beneath the eyes (genae) the cheeks.
Onmis.
(Orbitae) the eye-lids; in fome birds naked, in others covered with fhort foft feathers.

Birds have no eye-brows; but the Grous kind have in lieu a fcarlet naked fkin above, which are called fupercilia; the fame
word is alfo applied to any line of a different color that paffes from the bill over the eyes.

Birds are deftitute of auricles, or external ears, having an ori- Ears. fice for admiffion of found, open in all, but Owls, whofe ears are furnifhed with valves.

The chin, the face between the parts of the lower mandible and the neck, is generally covered with feathers; but in the Соск, and fome others, have carneous appendages, called Wattres (Palearia;) in others, is naked, and furnifhed with a Pouch, capable of great dilatation (Sacculus) as in the Pelican and Corvorants.
(Collum) the part that connects the head to the body, is longer in birds than any other animals; and longer in fuch as have long legs than thofe that have fhort, either for gathering up their meat from the ground, or ftriking their prey in the water, except in web-footed fowl, which are, by reverfing their bodies, deftined to fearch for food at the bottom of waters, as Swans, and the like. Birds, efpecially thofe that have a long neck, have the power of retracting, bending, or ftretching it out, in order to change their center of gravity from their legs to their wings.

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Consists of the Back (Dorfum) which is flat, ftrait, and inclines, terminated by the
(Uropygium) furnihed with two glands, fecreting a fattifh liquor

Back。

RUMF. from an orifice with which each is furnifhed: and which the birds exprefs with their bills, to oil or anoint the difcompofed parts of their feathers. Thefe glands are particularly large in moft web-footed water-fowl; but in the Grebes, which want tails, they are fmaller.

Breast. (Pectus) is ridged and very mufcular, defend by a forked bone (clavicula) the merry thought.

The fhort-winged birds, fuch as Grous, \&c. have their breafts moft flefhy or mufcular; as they require greater powers in flying than the long-winged birds, fuch as Gulls, Herons, which are fpecifically lighter, and have greater extent of fail.
Belly. (Abdomen) is covered with a ftrong fkin, and contains the entrails.
Vent. The Vent, or vent-feathers (Criffum) which lies between the thighs and the tail. The Anus lies hid in thofe feathers.

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Wings. Wings (Alae) adapted for flight in all birds, except the Dodo, Ostriches, great Auk, and the Pinguins, whofe wings are too fhort for the ufe of flying; but in the Dodo and Ostrich, when extended, ferve to accelerate their motion in running; and in the Pinguins perform the office of fins, in fwimming or diving.
Bastard Wing.
The wings have near their end an appendage covered with four or five feathers, called the Bastard Wing (ala notba) and alula spuria.

The leffer coverts (teEtrices) are the feathers which lie on the bones of the wings.

The greater coverts are thofe which lie beneath the former, and cover the quil-feathers and the fecondaries.

The Quil-feathers (primores) fpring from the firft bones (digiti and metacarpi) of the wings, and are ten in number.

Quil-feathers are broader on their inner than exterior fides.
Sgcomparies. The Secondaries (fecondarice) are thofe that rife from the fecond

## P R E FA C E.

con part (cubitus) and are about eighteen in number, are equally broad on both fides. The primary and fecondary wing-feathers are called Remiges.

A tuft of feathers placed beyond the fecondaries, near the junction of the wings with the body. This, in water-fowl, is generally longer than the fecondaries, and cuneiform.

The Scapulars are a tuft of long feathers arifing near the

Tertial.

Scapulars. junction of the wings (brachia) with the body, and lie along the fides of the back, but may be eafily diftinguifhed, and raifed with one's finger.

The Inner Coverts are thole that clothe the under fine of the Inner Coverts, wing.

The Subaxillary are peculiar to the greater Paradise.
The wings of forme birds are inftruments of offence; the Anhuima of Margrave has two ftrong fines in the front of each wing, a fpecies of Plover, Edw. tab. 47. and 280. has a fingle one on each; the whole tribe of Jacana, and the Gambol, or fpur-winged Goof of Mr. Willugbby, the fame.

The $\mathrm{T}_{\text {ail }}$ is the director, or rudder, of birds in their flight;

Subaxillary Feathers they rife, fink, or turn by its means; for, when the head points one way, the tail inclines to the other fides: it is, befides', an equilibrium or counterpoife to the other parts; the ufe is very evident in the Kite and Swallows.

The Tail confifts of ftrong feathers (reetrices) ten in number, as in the Woodpeckers, \&c. twelve in the Hawk tribe, and many others: the Gallinaceous, the Mergansers, and Duck kind, of more.

It is either even at the end, as in'moft birds, or forked, as in Swallows, \&cc. or cuneated, as in Magpies, \&c. or rounded, as in the Purple Jackdaw of Catefby. The Grebe is deftitute of a tail, the rump being covered with down; and that of the Cassowary with the feathers of the back.

Immediately over the tail, are certain feathers that fpring from the lower part of the back, and are called the coverts of the tail (uropygium.)
Thagho (Femora) are covered entirely with feathers in all land-birds, except the Bustards and the Ostriches; the lower part of thofe of all waders, or cloven-footed water-fowl, are naked; that of all webbed-footed fowl the fame, but in a lefs degree; in rapacious birds, are very mufcular.
Leics, (Crura) Thofe of rapacious fowls very ftrong, furnifhed with large tendons, and fitted for tearing, and a firm gripe. The legs of fome of this genus are covered with feathers down to the toes, fuch as the Golden Eagle, others to the very nails; but thofe of moft other birds are covered with fcales, or with a fkin divided into fegments, or continuous. In fome of the Pies, and in all the Passerine tribe, the fkin is thin and membranous; in thofe of web-footed water-fowl, ftrong.

The legs of moft birds are placed near the center of gravity: In land-birds, or in Waders that want the back toe, exactly fo; for they want that appendage to keep them erect. Auks, Grebes, Divers, and Pinguins, have their legs placed quite behind, fo are neceflitated to fit erect: Their pace is aukward and difficult, walking like men in fetters; hence Linnous ftyles their feet pedes compedes.

## $P \quad R \quad E \quad F \quad A \quad C \quad E$.

The legs of all cloven-footed water-fowl are long, as they mult wade in fearch of food: Of the palmated, fhort, except thofe of the Flamingo, the Avoset, and the Courier.
(Pedes) All land-birds that perch have a large back toe:
Fert. Moft of them have three toes forward, and one backward. Woodpeckers, Parrots, and other birds that climb much, have two forward, two backward; but Parrots have the power of bringing one of their hind toes forward while they are feeding themfelves. Owls have alfo the power of turning one of their fore toes backward. All the toes of the Swift turn forwards, which is peculiar among land-birds: The Tridactylous Woodpecker is affo anomalous, having only two toes forward, one backward: 'The Ostrich is another, having but two toes.
(Digiti) The toes of all Waders are divided; but, between Tozs. the exterior and middle toe, is generally a fmall web, reaching as far as the firf joint.

The Spoonbill ; and a Sandpiper I received from $N$. America, have webs that reach half way up each toe, or are Semi-palmated.

The toes of birds that fwim are either plain, as in the fingle inftance of the common water Hen or Gallinule; or pinnated, as in the Coots and Grebes; or entirely webbed or palmated, as in all other fwimmers.

All the Plover tribe, or Charadrif, want the back toe. In the fwimmers, the fame want prevales among the Albatrosses and Aurs. No water-fowl perch, except certain Herons; the Corvorant; and the Shag.
(Ungues) Rapacious birds have very ftrong, hooked, and

Claws.
fharp claws, Vultures excepted. Thofe of all land-birds that rooft on trees have alfo hooked claws, to enable them to perch in fafety while ancep.

The Gallinaceous tribe have broad concave claws for fcraping up the ground.

Grebes have flat nails like the human.
Among water-fowl only the Skua, Br. Zool. II. No. 243. and the Black toed Gull, Br. Zool. II. No. 244. have ftrong hooked or aquiline claws. All land-birds perch on trees, except the Struthious and fome of the Gallinaceous tribe. Parrots climb; Woodpeckers creep up the bodies and boughs of trees; Swallows cling.

All water-fowl reft on the ground, except certain Herons, and one fpecies of Ibis, the Spoonbile, one or two fpecies of Ducks, and of Corvorants.

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Feathers are defigned for two ufes, as coverings from the inclemency of the weather, and inftruments of motion through the air. They are placed in fuch a manner as to fall over one another, tegulatim, fo as to permit the wet to run off, and to exclude the cold; and thofe on the body are placed in a quincuncial form, moft apparent in the thick-fkinned water-fowl, particularly in the Divers.

Shafts.
The parts of a feather are, the Shafts, corneous, ftrong, light, rounded, and hollow at the lower part ; at the upper, convex above, concave beneath, and chiefly compofed of a pith.

On each fide the Shafts, are the
Vanes, broad on one fide, narrow on the other: Each vane confifts of a multitude of thin lamine *, ftiff, and of the nattre of a fplit quil. Thefe lamine are clofely braced together by the elegant contrivance of a multitude of fmall briftes; thofe on one fide hooked, the other ftrait, which lock into each other, and keep the vanes finooth, compact, and ftrong.

The vanes near the bottom of the fhafts are foft, unconnected, and downy.

Feathers are of three kinds; fuch as compofe the inftruments of flight; as the Pen-feathers; or thofe which form the wings and tail, and have a large fhaft. The vanes of the exterior fide bending downward, of the interior upwards, lying clofe on each other, fo that, when fpread, not a feather miffes its impulfe on the air $\dagger$. The component parts of thefe feathers are defcribed before.

The feathers that cover the body, which may be properly called the Plumage, have little fhaft, and much vane, and never are exerted or relaxed, unlefs in anger, fright, or illnefs.

The Down, Plume, which is difperfed over the whole body midft the plumage, is fhort, foft, unconnected, confifts of lanuginous vanes, and is intended for excluding that air or water which may penetrate or efcape through the former. This is particularly apparent in aquatic birds, and remarkably fo in the Anserine tribe. There are exceptions to the forms of feathers. The vanes of the fubaxillary feathers of the Paradise are unconnected, and the lamine diftant, looking like herring-bone.

* Derbam's phyfic. theol, 336. tab. f. 18, $19 . \quad+$ Derham.

C

Vanes.

Plumage.

Down.

Thofe of the tail of the Ostrich, and head of a fpecies of $\mathrm{Cu}-$ rasso, curled. Thofe of the Cassowary confift of two fhafts. arifing from a common ftem at the bottom. As do, at the approach of winter (after moulting) thofe of the Ptarmigans of Arctic countries: The feathers of the Pinguins, particularly thofe of the wings, confifting chiefly of thin flat fhafts, and more refemble fcales than feathers; thofe of the tail, like fplit: whale-bone.

## $F \quad L \quad I \quad G \quad H \quad T$.

The flight of birds is various; for, had all the fame, none could elude that of rapacious birds. Thofe which are much on wing, or flit from place to place, often owe their prefervation to that caufe : Thofe in the water to diving.
Rapacious.
Kites, and many of the Falcon tribe, glide fmoothly through the air, with fcarce any apparent motion of the wings.
Pirg. Most of the order of Pies fly quick, with a frequent repetition of the motion of the wings. The Paradise floats on the air. Woodpeckers fly aukwardly, and by jerks, and have a propenfity to fink in their progrefs.
Gallinaceovs. The Gallinaceous tribe, in general, fly very ftrong and fwiftly ; but their courfe is feldom long, by reafon of the weight of their bodies.
Columbine。

Passerine.
The Columbine race is of fingular fwiftnefs; witnefs the flight of the Meffenger Pigeon.

The Passerine fly with a quick repetition of ftrokes; their: flight, except in migration, is feldom diftant.

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Among them, the Swallow tribe is remarkably agile, their evolutions fudden, and their continuance on wing long.

Nature hath denied flight to the Struthious; but fill, in running, their fhort wings are of ufe, when erect, to collect the wind, and, like fails, to accelerate their motion.

Many of the greater Cloven-footed Water-fowl, or Waders, have a flow and flagging flight ; but moft of the leffer fly fwiftly, and moft of them with extended legs, to compenfate the fhortnefs of their tails. Rails and Galifules, fly with their legs hanging down.

Coots and Grebes, with difficulty are forced from the water; but when they rife, fly fwiftly. Grebes, and alfo Divers, fly with their hind parts downwards, by reafon of the forwardnefs of their wings.

Web-footed fowl are various in their light; feveral have a

Struthious.

Waders. failing or flagging wing, fuch as Gulls. Pinguins, and a fingle Auk, are denied the power of flight. Wild-geese, in their migrations, do not fly pell-mell, but in a regular figure, in order to cut the air with greater eafe; for example, in long lines, is the figure of $a \rightarrow$ or fome pointed form or letter, as the ancients report that the Cranes affumed, in their annual migrations, till their order was broken by ftorms.

> Strymona fic gelidum, bruma pellente, relinquunt, Potura te, Nile, Grues, primoque volatu Effingunt varias, cafu monftrante, figuras, Mox ubi percuffit tenfas Norus altior alas, Confufos temerè immifte glomerantur in orbes, Et turbata perit difperfis litera * pennis.
> Lucan. lib. v. 1. 718.
> * $\Upsilon \Delta \Lambda$.
> C 2

## Of the NUPTIALS, NIDIFICATION, and EGGS of BIRDS.

Most birds are monogamous, or pair, in fpring fixing on a mate, and keeping conftant, till the cares of incubation and educating the young brood is paft. This is the cafe, as far as we know, with all the birds of the firft, fecond, fourth, and fffth orders.

Birds that lofe their mates early, affociate with others; and Birds that lofe their firft eggs, will pair and lay again. The male as well as female of feveral join alternately in the trouble of incubation, and always in that of nutrition: When the young are hatched, both are bufied in looking out for, and bringing food to the neftlings; and, at that period, the mates of the melodious tribes, who, before, were perched on fome fprig, and by their warbling alleviated the care of the females confined to the neft, now join in the common duty.

Of the Gallinaceous tribe, the greateft part are polygamous, at left in a tame ftate; the Pheasant, many of the Grous, the Partridges, and Bustards, are monogamous; of the Grous, the Cock of the wood, and the Black Game affemble the females during the feafon of love, by their cries:

Et veneren incertam rapiunt.
The males of polygamous birds neglect their young, and, in: fome cafes, would deffroy them, if they met with them. The œconomy of the Struthious order, in this refpect, is obfcure. It is. probable that the three fpecies in the genus Ostrich are polygamous, like the common poultry, for they lay many eggs; the Dodo is faid to lay but one.

All Waders, or cloven-footed fowl, are monogamous, except the Ruffs; and all with pinnated feet, as far as I know, are alfo monogamous.

The fwimmers, or web-footed fowl, obferve the fame order, as far as can be remarked with any certainty; but many of the Auks affemble in the rocks in fuch numbers, and each individual fo contiguous, that it is not poffible to determine their method in this article.

Ir may be remarked, that the affection of birds to their young, is very violent during the whole time of nutrition, or as long as they continue in a helplefs ftate ; but fo foon as the brood can fly and fiift for itfelf, the parents neglect, and even drive it from their haunts, the affection ceafing with the neceffity of it: but, during that period,

The mothers nurfe it, and the fires defend;
The young difmifs'd to wander earth, or air, There ftops the inftinct, and there ends the care;
The link diffolves, each feeks a frefh embrace,
Another love fucceeds, another race,

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The Neft of a bird is one of thofe daily miracles, that, from its familiarity, is paffed over without regard. We ftare with wonder at things that rarely happen, and neglect the daily operations of nature, that ought firft to excite our admiration, and clame our attention.

Each bird, after nuptials, prepares a place fuited to its fpecies, for the depofiting its eggs, and fheltering its little brood: Diffe-
rent genera, and different fpecies, fet about the tafk in manners fuitable to their feveral natures; yet every individual of the fame fpecies collects the very fame materials, puts them together in the fame form, and chufes the fame fort of fituation for placing this temporary habitation. The young bird of the laft year, which never faw the building of a neft, directed by a heaven-taught fagacity, purfues the fame plan in the ftructure of it, and felects the fame materials as its parent did before. Birds of the fame fpecies, of different and remote countries, do the fame. The Swallows of England, and of the remoter parts of Germany, obferve the fame order of architecture.

息apacious. and bents, but often lined with fomething foft. They generally build in high rocks, ruined towers, and in defolate places: ene-mies to the whole feathered creation, they feem confcious of attacks, and feek folitude. A few build upon the ground.

Shrikes, the left of Rapacious birds, build their nefts in bufhes, with mofs, wool, \&c.

The order of Pies is very irregular in the ftructure of their nefts. Parrots, and, in fact, all birds with two toes forward and two backward (as far as I know) lay their eggs in the hollows of trees. And moft of this order creep along the bodies of trees, and lodge their eggs alfo within them.

Crows build in trees: Among them, the neft of the Magrie, compofed of rude materials, is made with much art, quite covered with thorns, and only a hole left for admittance.

The nefts of the Orioles are contrived with wonderful fagacity, and are hung at the end of fome bough, or between the forks
of extreme branches. In Europe, only three birds have penfile nefts; the common Oriole, the Parus Pendulinus, or Hangnest Titmouse, and one more *. But in the Torrid Zones, where the birds fear the fearch of the gliding ferpent and inquifitive monkey, the inftances are very frequent, a marvellous inftinct implanted in them for the prefervation of their young $\dagger$.

All of the Gallinaceous and Struthious orders lay their eggs on the ground. The Ostrich is the only exception, among

Gallinaceous. Struthious. birds, of the want of natural affection: Which leaveth ber eggs in the earth, and warmeth them in the dufi, and forgettetb that the foot may crufb them, or the wild beaft may break them.

The Columbine race makes a moft artlefs neft; a few fticks laid acrofs fuffice.

Most of the Passerine order build their nefts in fhrubs orbufhes, and fome in holes of walls, or banks. Several in the Torrid Zone are penfile from the boughs of trees; that of the Taylor Bird $\ddagger$, a wondrous inftance. Some of this order, fuch as Larks, and the Goatsucker, on the ground. Some Swallows make a curious plaifter neft beneath the roofs of houfes; and an Indian fpecies, one of a certain glutinous matter, which are collested as delicate ingredients for foups of Cbinefe epicures.

Most of the Cloven-footed Water-fowl, or Waders, lay upon the Waders, ground. Spoonbills and the Common Heron build in trees, and make large nefts with fticks, \&cc. Storks build on churches, or the tops of houfes.

Соots make a great neft near the water-fide.

* Vide Tour in Scotland, 2d Ed, page ior.
+ Indian Zool.
$\ddagger$ The fame:
Grebes

Grebrs. Grebes in the water, a floating nelt, perhaps adhering to fome neighboring reeds.
Web-footed. Web-footed fowl breed either on the ground, as the Avoset, Terns, fome of the Gulls, Mergansers, and Ducks: the laft pull the down from their breafts, to make a fofter and warmer bed for their young. Auks and Guillemots lay their eggs on the naked fhelves of high rocks; Pinguins in holes under ground: Among the Pelicans, that which gives name to the genus makes its neft in the defart, on the ground. Shags, fometimes on trees; Corvorants and Gannets, on high rocks, with flicks, dried AlGet, and other coarfe materials.

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\mathrm{E} \quad \mathrm{G} \quad \mathrm{G}, \mathrm{~S} .
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Rapacious.

Rses.

Rapacious birds, in general, lay few eggs; Eagles, and the larger kinds, fewer than the leffer. The eggs of Falcons and Owls are rounder than thofe of moft other birds.

The order of Pies vary greatly in the number of their eggs.
Parrots lay only two or three white eggs.
Crows lay fix eggs, greenih, mottled with dufky.
Cuckoos, as far as I can learn, two.
Woodpeckers, Wryneck, and Kingsfisher, lay eggs of a moft clear white and femi-tranfparent color. The Woodpeckers lay fix, the others more.

The Nuthatch lays often in the year, eight at a time, white, fpotted with brown.

The Hoopoe lays but two cinerous eggs.
The Creeper lays a great number of eggs.
The Honeysucker, the left and moft defencelefs of birds, lays

## $P \quad R \quad E \quad F \quad A \quad C$.

but two: but Providence wifely prevents the extinction of the genus, by a fwiftnefs of flight that eludes every purfuit.

The Gallinaceous order, the moft ufeful of any to mankind, lay the moft eggs, from eight to twenty; Benigna circa boc natura, innocua et efculenta animalia facunda generavit, is a fine obfervation of Pliny. With exception to the Bustard, a bird that hangs between the Gallinaceous and the Waders, which lays only two.

The Columbine order lays but two white eggs; but the domeftic kind, breeding almoft every month, fupports the remark of the Roman naturalift.

All of the Passerine order lay from four to fix eggs, except the Titmice and the Wren, which lay fifteen or eighteen, and the Goatfucker, which lays only two.

The Struthious order, which confifts but of two genera, difagree much in the number of eggs: the Ostrich laying many, as far as fifty; the Dodo but one.

The Cloven-footed Water-fowl, or Waders, lay, in general, four eggs. The Crane and the Norfolk Plover feldom more than two. All thofe of the $S_{\text {nipe }}$ and Plover genus are of a dirty white, or olive, fpotted with black, and fcarcely to be diftinguifhed in the holes they lay in. The bird called the Land Rail (an ambiguous fpecies) lays from fifteen to twenty. Of birds with pinnated feet, the Соот lays feven or eight eggs, and fometimes more. Grebes from four to eight, and thofe white.

The Web-footed, or Swimmers, differ in the number of their eggs. Thofe which border on the order of Waders, lay few eggs; the Avoset, two; the Flamingo, three; the Albatross, the Auks, and Guillemots, lay only one egg apiece: the eggs of

Passerine.

Struthious.

Waders.

Web-footrd.
the tewo laft, are of a fize ftrangely large in proportion to the bulk of the birds. They are commonily of a pale green color, fpotted and friped fo varioully, that not two are alike; which gives every individual the means of diftinguifhing its own, on the naked rock, where fuch multitudes affemble.

Divers, only two.
Terns and Gulls lay about four eggs, of a dirty olive, fpotted with black. .

Ducks lay from eight to twenty eggs; the eggs of all the genus. are of a pale green, or white, and unfpotted.

Pinguins lay two eggs *; white, and remarkably round.
Of the Pelican genus, the Gannet lays but one egg; the Shags, or Corvorants, fix or feven, all white; the laft the moft oblong of eggs.

A minute account of the Eggs of birds, merits a treatife of itfelf, or fhould follow the defcription of each fpecies. This is only meant to fhew the great conformity nature obferves in the fhape and colors of the eggs of congenerous birds; and alfo, that fhe keeps the fame uniformity of color in the eggs, as in the plumage of the birds they belong to.

Zinanni publifhed, at Venice, in 1737, a treatife on eggs, illuftrated with accurate figures of 106 eggs. Mr. Reyger of Dantzick publifhed, in 1766, a pofthumous work by Klein, with 21 plates, elegantly coloured: But much remains for future writers.

$$
\text { * Perrofe's Voy. Falkland Ifles, } 32 .
$$

SYSTEM.

## PREEACE <br> $$
\begin{array}{llllll} S & Y & S & T & E & M \end{array}
$$

Considering the many fyftems that have been offered to the public of late years *, I hope I flall not be accufed of national partiality, in giving the preference to that compofed by Mr. Ray in 1667 , and afterwards publifhed in 1678 . It would be unfair to conceal the writer, from whom our great countryman took the original hint of forming that fyftem, which has fince proved the foundation of all that has been compofed fince that period.

It was a Frencbman, Belon of Mans, who firit attempted to range birds according to their natures, and performed great matters, confidering the unenlightened age he lived in ; for his book was publifhed in $1555^{\text {. }}$. His arrangement of rapacious birds is as judicious as that of the lateft writers '; for his fecond chapter treats of Vultures, Falcons, Shrikes, and Owls; in the two next, he paffes over to the Webfooted Water-fowl, and to the Cloven-footed; in the fifth, he includes the Gallinaceous and Struthious, but mixes with them the Plovers, Buntings, and Larks; in the fixth are the Pies, Pigeons, and Thrusfes; and the feventh takes in the reft of the Passerine order.

Notwithstanding the great defects that every naturalift will at once fee in the arrangement of the leffer birds of this writer, yet he will obferve a rectitude of intention in

[^0]general, and a fine notion of fyftem, which was left to the following age to mature and bring to perfection. Accordingly, Mr. Ray, and his illuftriaus pupil the Hon. Fra. Willughby, affumed the plan; but, with great judgment, flung into their proper ftations and proper genera, thofe which Belon had confufedly mixed together. They formed the great divifion of Terrestrial and Aeuatic birds; they made every fpecies occupy their proper place, confulting at once exterior form, and natural habit. They could not bear the affected intervention of aquatic birds in the midft of terreftrial birds. They placed the laft by themfelves, clear and diftinct from thofe whofe haunts and œconomy were fo different.

Various attempts have been made to alter this fyftem of our countrymen. It is a difagreeable and invidious tafk to expofe the defects of other methodifts, who may have, in many refpects, great merit. I leave that to the peevifh malignancy of the minute critics; therefore fhall only acknowlege the fources from which I draw the materials of the prefent work, and give each their due fhare of merit.

Mr Ray's general plan is fo judicious, that to me it feems fcarcely poffible to make any change in it for the better; yer, notwithftanding he was in a manner the founder of fyftematic Zoology, later difcoveries have made a few improvements on his labors. My candid friend Linnseus did not take it amifs, that I, in part, neglected his example; for I permit the Landfowl to follow one another, undivided by the Water-fowl, the Gralle and Anferes of his fyftem; but, in my generical arrangement, I moft punctually attend to the order he has given
in his feveral divifions, except in thofe of his Anferes, and a few of his Grallc. For, after the manner of M. Briffon, I make a diftinct order of Water-fowl with pinnated feet, placing them between the Waders or Cloven-footed Water-fowl and the Web-footed. The Ostrich, and Land-birds with wings ufelefs for flight, I place as a diftinct order. The Trumpeter (Pfopbia Linnai) and the Bustards, I place at the end of the Gallinaceous tribe. All are Land-birds. The firft multiparous, like the generality of the Gallinaceous tribe ; the laft granivorous, fwift runners, avoiders of wet-places; and both have bills fomewhat arched. It muft be confeffed, that both have legs naked above the knees; and the laft, like the Waders, lay but few eggs. They feem ambiguous birds that have affinity with each order; and it is hoped, that each naturalift may be indulged the toleration of placing them as fuits his own opinion. Before I conclude, let me not pafs over the affiftance received in fome of my definitions from Mr. Scopolr, an ornithologift of Carniola, who, in 1768, favored the world with a moft elaborate account of the birds that had fallen within his obfervation. Thus, I flatter myfelf, I have given every naturalift, I am indebted to, his due.
> —— Miferum eft aliorum incumbere fame. Ne collapfa ruant fubductis tecta Columnis.
'TABLE of ARRANGEMENT, with the correfpondent ORDERS and GENERA in the Systema Nature of Linneus.

Division I. LAND-BIRDS. Div. If. WATER-FOWL.
Divifion 1. $\left\{\begin{array}{cl}\text { Order I. Rapacious. } & \text { Accipitres Linner. } \\ \text { II. Pies. } & \text { Picæ. } \\ \text { II. Gallinaceous. } & \text { Gallinæ. } \\ \text { IV. Columbine. } & \text { Pafferes. } \\ \text { V. Pafterine. } & \text { Pafferes. } \\ \text { VI. Struthious. } & \text { Sallinæ. } \\ \text { Grallæ. }\end{array}\right.$

Divifion II. $\left.\left\{\begin{array}{cc}\text { OrderVII. Cloven-footed, or } \\ \text { Waders. }\end{array}\right\} \begin{array}{l}\text { Grallæ. } \\ \text { VIII. Pinnated feet. }\end{array} \begin{array}{l}\left\{\begin{array}{l}\text { Anferes. } \\ \text { Gralle. }\end{array}\right. \\ \text { IX. Web-footed. }\end{array}\right\} \begin{aligned} & \text { Anferes. } \\ & \text { Gralle. }\end{aligned}$
D I V. I.
ORDERI. RAPACIOUS.

| I Vulture | Vultur | 3 Owl | Strix |
| :--- | :--- | :--- | :--- |
| 2 Falcon | Falco |  |  |

Orderil.

## Order II. PIES.

| 4 Shrike | Lanius | 17 Curucui | Trogon |
| :--- | :--- | :--- | :--- |
| 5 Parrot | Pfittacus | 18 Barbet | Bucco |
| 6 Toucan | Ramphaftos | 19 Cuckoo | Cuculus |
| 7 Motmot | Ramphaftos | 20 Wryneck | Junx |
| 8 Hornbill | Buceros | 21 Woodpecker | Picus |
| 9 Beefeater | Buphaga | 22 Jacamar | Alcedo |
| 10 Ani | Crotophaga | 23 Kingsfifher | Alcedo |
| 11 Wattle |  | 24 Nuthatch | Sitta |
| 12 Crow | Corvus | 25 Tody | Todus |
| 13 Roller | Coràcias | 26 Bee-eater | Merops |
| 14 Oriole | Oriolus | 27 Hoopoe | Upupa |
| 15 Grakle | Gracula | 28 Creeper | Certhia |
| 16 Paradife | Paradifæa | 29 Honeyfucker Trochilus |  |

Ord. III. GALLINACEOUS.
30 Cock Phafianus 35 Pheafant Phafianus

3I Turkey
Meleagris
36 Grous Tetrao
32 Pintado Numida 37 Partridge Tetrao
33 Curaffo Crax 38 Trumpeter Pfophia
34 Peacock Pavo 39 Buftard Otis

Ord. IV. COLUMBINE.
40 Pigeon Columba

| 41 Stare | Sturnus | 49 Flycatcher | Mufcicapa |
| :---: | :---: | :---: | :---: |
| 42 Thrufh | Turdus | 50 Lark | Alauda |
| 43 Chatterer | Ampelis | 5 I Wagtail | Motacilla |
| 44 Coly | Loxia | 52 Warblers | Motacilla |
| 45 Grofbeak | Loxia | 53 Manakin | Pipra |
| 46 Bunting | Emberiza | 54 Titmoufe | Parus |
| 47 Tanager | Tanagra | 55 Swallow | Hirundo |
| 48 Finch | Fringilla | 56 Goatfucker | Caprimulgus |
| Ord. VI. STRUTHIOUS. |  |  |  |
| 57 Dodo | Didus | 58 Oftrich | Struthio |
| D I V. II. |  |  |  |
| Ord. VII. CLOVEN-FOOTED, or WADERS. |  |  |  |
| 59 Spoonbill | Platalea | 68 Sandpiper | Tringa |
| 60 Screamer | Palamedea | 69 Plover | Charadrius |
| 6ı Jabiru | Mycteria | 70 Oyftercatcher | Hæmatopus |
| 62 Boatbill | Cancroma | 71 Jacana | Parra |
| 63 Heron | Ardea | 72 Pratincole | Hirundo |
| 64 Umbre | Scopus Briff. | 73 Rail | Rallus |
| 65 Ibis | Tantalus | 74 Sheath-Bill |  |
| 66 Curlew | Scolopax | 75 Gallinule | Fulica |
| 67 Snipe | Scolopax |  |  |

## ( xxy )

Ord. VIII. PINNATED-FEET。

| 76 Phalarope <br> 77 Coot | Tringa <br> Fulica | 8 Grebe | Colymbus |
| :---: | :---: | :---: | :---: |
| Ord. IX. W E B-F O O TE D. |  |  |  |
| 79 Avofet | Recurviroftra | 88 Gull | Larus |
| 80 Courier | Currira Briff. | 89 Petrel | Procellaria |
| 8. Flammant | Phœnicopterus | 90 Merganfer | Mergus |
| 82 Albatrofs | Diomedea | 91 Duck | Anas |
| 83 Auk | Alca |  | $\{$ Diomedea |
| 84 Guillemot | Colymbus |  | \{Phæton |
| 85 Diver | Colymbus | 93 Pelican | Pelicanus |
| 85 Skimmer | Rhyncops | 94 Tropic | Phæton |
| 87 Tern | Sterna | 95 Darter | Plotus |

Explanation of the Figure on the Title-Page.
I Baftard wing, Alula Jpuria.
2 Leffer coverts of the wings, TeEtrices prima.
3 Greater coverts, TeEtrices fecunde.
4 Quill feathers, Primores.
5. Secondary feathers, Secundaria. 6 Tertials.
7 Coverts of the tail, Uropygium.
8 Vent feathers, Criffum.
9 Tail feathers, Rectrices.


Fig. 56. le Sacre Histoire Naturelle Fig. 57. Le Faucon Sort fig. 5S. le Fraucon hagard

## DIV.I. LAND-FOWL.

## $O \quad R \quad D \quad E \quad R \quad I$.

## R A P A C I O U S.

## A C C I P I TRES Linnai.

Bill, ftrait, hooked only at the end; edges cultrated, bafe covered with a thin fkin.
Nostrils, differing in different fecies.
Tongue, large and flefhy.
Head, cheeks, chin, and often neck, either naked or covered only with down or fhort hairs; the neck retractile.
Claw, often hanging over the breaft.
Legs and Feet, covered with great fcales; the firf joint of the middle toe connected to that of the outmoft, by a ftrong membrane.
Claws, large, little hooked, and very blunt.
Insides of the wings covered with down.
King of the Vultures. Bearded and crefted Vultures. Edw. If.
I. Vulture.

Example. CVI. CCXI. Bengal and Secretary Vultures. Latham's Syn. of Birds. Pl. I, 2.
The ru* of Arifotle, who mentions two fpecies.
Vultur of Linneus, genus I. who enumerates VIII fpecies. The Vuliur and Vautour of Briffon, who defcribes XII fpecies. $M_{*}$ ab Buffon VIII. Mr. Ray VIII.

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R A P A C I O U S.
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No Vultures north of the Baltic, none in Great Britain. Various fpecies in Europe, Afa, Africa, and America, as low as Terra del Fuego.
A fluggifh, ungenerous race; prey oftener on dead animals, and even putrid carcafes, than on living creatures. Their fenfe of fimelling moft exquifite. Collect in flocks from afar; directed to their prey by the fagacity of their noftrils. Fly flowly and heavily. Are moft greedy, and voracious to a proverb. Are not timid, for they prey in the midft of cities, undaunted by mankind.
II. Falcon. Bill, hooked; covered at the bafe with a naked membrane, or cere.
Nostrils, fmall, oval, placed in the cere.
Tongue, large, flefly, and often cleft at the end.
Head and Neck, covered with feathers.
Legs and Feet, fcaly; middle toe connected, from its firft joint, to that of the outmoft, by a ftrong membrane.
Claws, large, much hooked, and very fharp; that of the outmoft toe the left.
The Female larger and ftronger than the male.
Example. Golden Eagle, Br. Zool. fol. tab. A. Falcon gentil. Br. Zool. I. tab. XXI. Chinefe. E. N. Zealand, F. Latham's Syn. of Birds. Pl. 3,4 .
A carnivorous, rapacious race; not gregarious; quick-fighted: Generally fly high. Build in lofty places ; except a few fpecies which neftle on the ground.
Eagles and the larger kind of Falcons do not lay more than four eggs; fome of the leffer, fuch as the Keftril, lay fix or feven;
the


Crested Hobby.


## R A P A. C I O U S.

the Eagles, properly fo called, feldom more than two or three: Drink feidom; the juices of their animal-food preventing thirft. Capable of enduring very long abftinence. Very long lived. Are clamorous ; their note puling and plaintive. Strike their prey with their feet. Their excrements white and fluid. Vomit up the indigefted hair or feathers of their prey, in form of a round ball. Vary in the color of their plumage at different ages; fo the fpecies are often unneceffarily multiplied by Ornithologifts. Inhabit every climate.
Mr. Ray and M. Brifon feparate the Eagles from the Falcons. The firtt has VIII fpecies of Eagles, and XXV of Falcons or Hawks. The laft, XV of Eagles, and XXXVII of Falcons. Linnetes, who, with much propriety, places both in one genus, enumerates thirty-two. Mr. Ray's divifion of the nuggifh, and of the more active and generous, a very judicious one.

Bili, hooked; bafe covered with briftles; no cere.
III. Owl.

Nostrils, oblong.
Tongue, cleft at the end.
Eyes, very large and protuberant, furrounded by a circle of feathers.
Head, very large and round; full of feathers.
Ears, large and open.
Outmost Toe, verfatile, or capable of being turned back, fo as to act with the back toe.
Claws, hooked and fharp.
Eagle Owl, Br. Zool. I. tab. XXIX. Owls. Latham's Syn. of Ix. Birds. Pl. 5.
A nocturnal Bird, preys in the evening and by night; often flies

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R A P A C I O. U S.
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along the ground in fearch of prey; carnivorous; quick of hearing; winks in the day; makes a hooting noife in the night; fometimes a fqueaking. Snores loud. Builds in rocks, in hollow trees, or ruined edifices. Lays not more than five eggs. Inhabits every climate.
Mr. Ray divides this genus into two ; thofe with and thofe without Horns; enumerates III fpecies with, and VIII without. M. Brifon ftyles the firft Afio, and has IX; the other Strix, and has XI fpecies. Buffon XV.


Histoire Naturelle.
Fig. 64.Le Gnand Duc. Fig. 65.lHibou, ou Dur Moyen Fig. 66. Le Scops.

## ORDER II.

## P I E S.

## P I C Æ Linnai.

Bill, ftrait, hooked only at the end; near the end of the upper

IV. Shirke. mandible a fharp procefs. No cere.

Nostrils; round, covered with ftiff briftes.
Tongue, jagged at the end.
Tors divided to the origin.
Tail cuneiform.
Butcher Birds, Br. Zool. fol. tab. C. I. Br. Zool. I. tab. XXXIII. Ex. Carnivorous or infectivorous; kill fmall birds by ftrangling, or by crufhing their fkull with their bills, then pull them to pieces, and ftick the fragments on thorns; do the fame by infects. Bold, noify, and querulous. Build in low bufhes. Lay fix eggs.
The genus that connects the rapacious Birds and Pies; agreeing with the firf in the ftrength and crookednefs of the bill, and its predatory life ; with the laft, in the form of the toes, the tongue, and tail. Nearly related to the Magpie: The French ftyle it Pie-Griefche.
Different fecies found in the new and old world, and in all climates, except within the Arctic circle.
The Butcher Birds or Skrikes of Mr. Ray, who defcribes IV fpecies. The Lanius of Linnexus, who has XXVI fpecies. 10

The Lanius and Pie-Griefche of Briffon, who reckons up XXVI. Buffon XIV.
Ireject the compound name of Butcher-Bird, and retain the old: Englifb name of Sbrike, from the noife.
V. Parrot. Bill, hooked from the bafe: Upper mandible moveable.

Nostrils, round, placed in the bafe of the bill.
Tongue, broad, blunt at the end.
Head, large; crown flat.
Legs, fhort. Toes, two backward, two forward.
䜹. Maccaw Edw. CLVIII. Parrot, CLXVI.
Gregarious, clamorous; the wild note loud and harfh. Very docile, imitative of founds; imitates the human feech. Climbs by help of the bill and feet. Makes ufe of the feet as hands to convey meat to the mouth, turning the legs outward. Frugivorous: Can crack the hardeft kernels. Breeds in hollow trees. Makes no neft: Lays two or three white eggs: Inhabits within the Tropics, Africa, Afa, and America; a few are found as far North as Carolina: and South as the Straits of Magellan.
Pfitacus of Linveus, and Brifon, IV. 182. The firf has XLVII. the laft XC fecies.
Vi. Toucan. Bill, mof difproportionably large; convex and carinated at top, and bending at the end; hollow; very light, ferrated at the edges.
Nostrils, fmall and round, "placed clofe to the head, and hid in the feathers.
Tongue, long and narrow, feathered at the edges.
Tozs, two forward, and two backward.


White Collared Parrot.

Toucans Edw. LXIV. CCXXXIX.
A genus confined to America, within the Tropics. Feeds on fruits: Breeds in hollow trees. Is very noify; eafily made tame.
Mr Ray, minled by the name of Brafilian Pie, places it with the Magpie. Linnteus calls it Rbamphafos, a ${ }^{\text {P }}$ a $\mu$.pos, a broad fword, from the form of its bill, and has VIII fpecies. Brifon, IV. 407. retains the Braflian name Toucan, and has XII fpecies.

Bill, ftrong, nlightly incurvated; ferrated at the edges.
VII. MOTMOT.

Nostrils, covered with feathers.
Tail, cuneiform: The two middle feathers much longer than the others: Near the ends quite deftitute of webs. The webs at the ends fubovated.
Toes, three before, one behind; the fore toes clofely united almoft their whole length.

Brafilian faw-billed Roller. Edw. CCCXXVI. Ex.
Inhabits S. America.
Ramphaftos Momota of Linneus.
Momotus of Brifon, IV. 464. who has II fpecies. I retain the Mexican name in Fernandez bif. av. Nov. Hifp. 52.

Great bending Bill, oft-times a large protuberance refembling another bill on the upper mandible. Edges jagged.
Nostrils, fmall, round, placed behind the bafe of the bill. Tongue.

Legs, fcaly: Toes, three forward, one backward: The middle connected to the outmoft, as far as the third joint; to the inmoft, as far as the firft.

Ex. Several Bills Edw. CCLXXXI. Wil. orn. tab. XVII. A fpecies with a horn pointing forward, and wattles under the chin, engraven in Moore's travels into the inland parts of Africa, p. io8.. Found in the Indian inands.
Buceros of Linnetus, a Bous an ox, and xegas a horn, from the form of the bill. Hydrocorax of Briffon, II. 565 , or Water Raven ${ }_{9}$, from its being fuppofed to inhabit watry places.
Linnes's has IV fpecies. Brifon V.
IX. BEEF. Bill, ftrong, thick, ftrait, nearly fquare. Upper mandible a little protuberant; on the lower, a large angle.
Tongur.
Toes, three before, one behind. The middle connected to theoutmoft as far as the firft joint.

Ex. Le pique Bœuf. Brifon II. tab. XLII.
Inhabits Senegal. Only one known fpecies.
Buphaga of Linnewus and Briffon II. 437. a Bous an ox, and $\varphi a y$ siv. to eat, becaufe it picks holes in the backs of cattle, to get at the Larve of infects depofited there.
X. ANY. BiLL, compreffed, greatly arched, half oval, thin, cultrated at top. Nostrils, round.
Toes, two backward, two forward. Ten feathers in the Taid.

Razor-bill'd Blackbird. Catefly Carol. app. III. the feet faultily
Ex。 expreffed. Le Bout de Petun, Briffon IV. tab. XVIII.
Inhabits South America: Within the Tropics.
Crotophagus of Linnetus and Briffon IV. 177. from Kpotwu, becaufe this genus feeds on ticks. Only II fpecies. Mr. Ray places it at the end of the Parrots. I retain the Brafilian name Ani.

Bill, ftrong, thick, rounded at top; convex.
Nostrils, covered pattly above with a flap; and near their ends with a tuft of feathers: On each fide of the bafe of the bill, a red, thin, flefhy membrane, or Wattle, of a round form.
Tongue, truncated, fplit, cpiliated.
Tail, long and cuneiform.
Legs and Feet, frong: the firft carinated behind.
Toes, large; three forward, backward. Claws, great and crooked, efpecially that of the hind toe.
A non-defcript genus, as yet difcovered only in New Zeland.

Bill, ftrong, upper mandible a little convex. Edges cultrated.
Nostrils, covered with briftles reflected over them.
Tongue, divided at the end.
Toes, three forward, one backward, the middle joined to the outmoft as far as the firft joint.
Royfton Crow, Br. Zool. fol. tab. D. I.
XII. CROW.

Ex.
XI. WATTLE.

位.

Different fpecies found in every climate : clamorous: promifcuous feeders: build in trees: lay about fix eggs.
Corvus of Linnesus, who mentions XIX feccies.
Briffon divides this genus into Coracias, or the Chough; Corvus, F 2
or Crow; Pica, or Magpye; Garrulus, or Jay; Nucifraga, or Nutbreaker; including XXIII fpecies.
XIII. ROLLER. Bill, ftrait, bending a little towards the end, edges cultrated. Nostrile, narrow and naked.
Toes, three forward; divided to thei origin; one backward.
Ex. Blue Jay Edw. CCCXXVI. Roller Br. Zool. II. App. Europe, Afa, Africa, and the hot parts of Amerisa. A genus nearly related to the Crow. Thence Linnexus calls it Coracias: a word of Arifotle's, applied only to what we call the Cornifb Cbough. Kogaxias Фoviroguyरos, Hift. an. lib. IX. c. 24.
Coracias of Linnetus, who has VI fpecies. Galsulus of Brifon; who has X fpecies.
XIV. ORIOLE. Bill, ftrait, conic, very fharp pointed, edges cultrated, inclining inwards. Mandibles of equal length.
Nostrils, fmall, placed at the bafe of the bill, and partly covered.
Tongue, divided at the end.
Toes, three forward, one backward: the middle joined near the bafe to the outmoft one behind.

Ex. Redwing Starling Catefby Carol. I. XIII.
In general, inhabitants of America.
A numerous race, gregarious, noify, frugivorous, granivorous, yoracious: often have penfile neits.
Linneus enumerates, under the title of Oriolus, XX feecies, but fome belong to the Turdine or Thrufh kind. Briffon II. 85. calls this genus IEterus, and has XXX fpecies. The genuine Oriolus is a Thrufh.

Bili, convex, thick, compreffed a little on the fides, cultrated. XV. GRAKLE. Nostrils, fmall, near the bafe of the bill; often near the edge. Tongue, entire ; rather fharp at the end.
Toes, three forward, one backward; the middle connected at the bafe to the outmoft.
Claws, hooked and fharp.
Mino, Edw. XVII. Chinefe Starling. Edw. XIX.
Inhabits Afia and America.
Gracula of Linnetus, VIII fpecies. Ieterus, Pica, and Turdus of Briffon.
None of Linn eus's fpecies can be the Gractus of Pliny, or our Chough. For all his are Afatic, African, or American.

Bili, nlightly bending. The bafe covered with velvet-like feathers. XVI.PARADISE Nostrils, fmall, and concealed by the feathers.
Tail, confifting of ten feathers; two very long naked fhafts, fpringing from above the rump.
Legs and Feet, very large and ftrong; three toes forward, one backward : the middle connected as far as the firft joint of the exterior.
Claws, large, hooked, and farp.
Birds of Paradife, Edw. CX. CXI.
Floats on the air, and often flies fwiftly backwards and forwards; like the Swallow; often lights, and perches on trees; feeding on fruits, and even fmall birds.
Inhabits New Guinea and the Molucca Ifles. Paradifea of Linnetus, III fpecies. Manucodiata of Briffon II. I30 only II fpecies. More fince difcovered.
XVII. CURUCUI BILL, fhort, thick, and convex.

Nostrils, covered with ftiff briftles.
Tongue.
Toes, two backward, two forward.
Legs, feathered down to the toes.
Tarl, confifts of twelve feathers.
I. Yellow-bellied green Cuckow, Edw. CCCXXXI.

Fafciated Couroucou. Ind. Zool. tab. V.
Probably have the manners of the Woodpeckers.
Inhabits South America.
Trogon of Linneus, III fpecies. The fame of Briffon, IV. 164. has VI fpecies. The reafon for the name Trogon feems to be, becaufe Pliny has fuch a name after the Picus. As the genus is Braflian, I retain the name of the country.

SVIII. BARBET. BILL, ftrong, ftrait, bending a little towards the point. Bafe covered with ftrong briftles, pointing downwards.
Nostrils, hid in the feathers.
Tongue.
Toes, two backward, two forward, divided to their origin.
TAil, confifting of ten weak feathers.
Ex. Yellow Woodpecker, with red foots, Edwards, CCCXXXIII. Inhabits South America and the Indian Iflana's.
Bucco of Linnews and Briffon IV. 91. The firt has I. fpecies. The laft V. Brifon ftyles it Bucco from the fulnefs of the cheeks; Barbu from its briftles, a fort of beard, from which I form the generical name Barbet.

Bill, weak, a little bending.
Nostrils, bounded by a fmall rim.
Tongue, fhort, pointed.
Toes, two forward, two backward.
TAIL, cuneated; confifts of ten foft feathers.
Cuckoo, Br. Zool. fol. tab. G. G. I. Br. Zool. I. tab. XXXVI.
Ex.
Inhabits every climate.
Cuculus of Linneus and Briffon, IV. 104. The one has XXII fpecies; the other XXVIII.
The roxxu\%, and Coccyx of the Ancients, a word formed from the found of the European fpecies. Cuculus is only ufed in an opprobrious fenfe.

Bill, weak, fender, pointed.
Nostrils, large and oval, near the ridge of the bill.
Tongue, very long, cylindric, very flender, and terminated by a hard point, miffile.
Toes, two forward, two backward.
'Tail, confifting of ten even and foft feathers.
Wryneck, Br. Zool. fol. tab. G. Br. Zool. I. tab. XXXVI.
Its manners, vide Br. Zool.
Inhabits Europe and Bengal. Only one fpecies known. Iur $\xi$ of Arifotle, Fynx of Pliny, Linnetus, and Brijon, vol. iv. 3.

BiLL, ftrait, ftrong, angular; cuneated at the end.
Nostrils, covered with briftles reflected down.
Tongue, very long, flender, cylindric, bony, hard, and jagged at the end, miffile.

Toes, two forward, two backward.
Tail, confifting of ten hard, ftiff, fharp-pointed feathers.
$\underline{E}_{x,} \quad$ Woodpeckers, Br. Zool. fol. tab. E. Br. Zool. I. tab. XXXVII.
The manners, vide Br. Zool.
Inhabits all the Continents.
$\Delta$ Quoro $\alpha a \pi$ Ins or Oak-rapper of Ariftotle, Picus Martius of Pliny, Picus of Linneteus and Brifon, IV. 8. Linnefus has XXI. Brifon XXXI fpecies...
XXII.JACAMAR BILL, long, frait, fharp pointed, quadrangular.

Nostrils.
Tongue, fhort.
Legs, feathered before to the Toes.
Toes, difpofed two forward, two backward. The two foremot clofely connected together.
Ex. Jacamiciri Edw. CCCXXXIV.
Inhabits S. America.
Alcedo Galbula of Linnews. Galbulà of Briffon, IV. 86. who has II fpecies. I retain his name from the Brafilian facamiciri.
XXIII. KINGS- Bill, long, Atrong, ftrait, fharp pointed.

EISHER.
Nostrils, fmall, and hid in the feathers.
Toneue, fhort, broad, fharp pointed.
Legs, fhort; three toes forward, one backward : three lower joints of the middle toe joined clofely to thofe of the outmoft.

Ex. Kingsfifher, Br. Zool. fol. tab. I. Br. Zool. I. tab. XXXVIII. - Found in all the quarters of the world. Flies fwiftly, ftrong, and direct. All the fpecies do not haunt rivers, nor prey on $2.00^{\circ}$ fifh.


ICAPREOWS JacKamar 2.Yeṭlow-cheeked-creeper



Red-Headed King-Fisher.

1.GREEN Tody. 2.BRown Tody.
fifh. 'Adauav of Arifotle, the Halcyon of Pliny, Alcedo of Linnevs, Ifpida of Brifon, IV 47 I . The firft gives us XV fpecies. Briffon XXVI.

Bile, ftrait ; on the lower mandible a fmall angle.
Nostrils, fmall, covered with feathers reflected over them.
XXIV. NUTHATCH.

Tongue, fhort, horny at the end, and jagged.
Toes, three forward, one backward. The middle toe joined clofely at the bafe to both the outmoft. Back toe as large as the middle toe.
Its manners, vide Br. Zool.
Nuthatch Br. Zool. fol. tab. H. Br. Zool. I. tab. XXXVIII.
Inhabits Europe, Afia, America.
Sitta of Linnetus and Brifon III. 588. he defcribes V fpecies, Linnetus II. Arifotle's $\mathcal{C}_{1}$ ITn not eafily determinable.

Bile, thin, depreffed, broad, bafe befet with briftles.
Nostrils, fmall.
Tongue.
Toes, three forward, one backward, connected like thofe of the Kingsfifher.

Green-fparrow, Edw. CXXI. Ex

Inhabits the hot parts of America.
Todus of Linnetus and Brifon IV. 528. who enumerate II fpecies. The name firft given it by Dr. Brown, I fuppofe, from Todi, fmall birds.

G Bile,
XXVI. BEE. $\quad$ Bill, quadrangular, a little incurvated, fharp pointed.
EATER. Nostrils, fmall, placed near the bafe.
Tongue, flender.
Toes, three forward, one backward: The three lower joints of the middle toe clofely joined to thofe of the outmoft.
Exi Indian Bee-eater, Edw. CLXXXIII.
Feeds on Bees, which it catches in its flight; from which the Englifh name.
Inhabits Soutbern Europe, Afia, Africa, and America.
Merops of Linneus, Apiafter of Brifon, IV. 532. The firlt has VII fpecies, the laft XIII.
xXVII,HOOPOE BILL, long, flender, and bending.
Nostrils, fimall, placed near the bafe.
Tongue, fhort, fagittal.
Toes, three forward, one backward; middle toe clofely united at the bafe to the outmoft.

Ex. Hoopoe, Br. Zool. fol. tab. L. Br. Zool. I. tab. XXXIX.
Inhabits Europe and Afa.
Upupa of Linnetus. Upupa and Promerops of Brifon, II 456.460. Linneus has III fpecies. Brifon I of the firft, V of the laft.
XXVIII. Bill, very flender, weak; incurvated.

CREEPER. Nostrils, fmall.
Tongue, not fo long as the bill; hard, and fharp at the point.
Toes, three forward, one backward; large back toe, and long hooked claws.


Indian Bee Eater.
$3$


Honeysuckers.

## P I E S.

Creeper, Br. Zool. fol. tab. K. Br. Zool. I. XXXIX. According
Ex. to its name, creeps up and down the trunks and branches of trees, feeding on infects, their eggs and larva.
Inhabits Eurrope, Afia, Africa, and America.
Certbia of Linnetus and Brifon, III. 602. The firt has XXV fpecies; the laft XXXII.

Bill, flender and weak; in fome ftrait, in others incurvated. Nostrils, minute.
Tongue, very long, formed of two conjoined cylindric tubes; miffile.
Toes, three forward, one backward.
Tail, confifts of ten feathers.
Long tailed red humming bird, Edw. XXXII. which is the fort XXIX. HONEY. SUCKER. Ex, with crooked bills, called by Brifon, Polytmi.
White bellied humming bird, Edw. XXXV: or the kind with ftrait bills: The Mellifuga of Brifon.
Feeds on the fweet juices of flowers, which it fucks out with its tubular tongue, hanging in the air on its wings.
Inhabits America, efpecially the warm parts: A numerous genus. Trocbilus of Linneus; Polytmus and Mellifuga of Brifon. Linnetus has XXII fpecies; Briffon XVI of the Polytmus, XX of the "Mellifuga. The old Englifh name was Humming-bird; which I now change to Honey-Suçer.

$$
\mathrm{G}_{2} \quad \text { ORDER }
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## $\left[\begin{array}{ll}18 & ]\end{array}\right.$

## O R D E R III.

## G ALLINACEOUS.

Heavy bodies, fhort wings, very convex; ftrong, arched, fhort bills: The upper mandible fhutting over the edges of the lower. The flefh delicate, and of excellent nutriment; ftrong legs; toes joined at the bafe, as far as the firft joint, by a ftrong membrane. Claws broad, formed for fcratching up the ground. Nore than twelve feathers in the tail.

Granivorous, feminivorous, infectivorous, fwift runners, of fhort flight; often polygamous, very prolific, lay their eggs on the bare ground. Sonorous, querulous, and pugnacious.
$O_{R}$, with bills flightly convex; granivorous, feminivorous, infectivorous; long legs, naked above the knees: The genus that connects the land and the water-fowl. Agreeing with the cloven-footed water-fowl in the length and nakednefs of the legs, and the fewnefs of its eggs: Difagreeing in place, foods and form of bill, and number of feathers in the tail.


II isloire Naturelle Figg su2Peintade Fig., S3.le Con Fig. Eq le Dindorn
GALLINACEOUS.

Bile, very convex, fhort, and ftrong.
Nostrils, bodied in a flefhy fubftance.
Tongue, cartilaginous, fharp, entire.
Head, adorned with a Comb, or elevated ferrated flefh.
Spurs on the legs.
Tail, confifting of fourteen feathers; that of the male, ficklefhaped.

To be found in every farm-yard. Ex. Its native country India and its ifles.
Domefticated every where.
Pbafianus of Linnetus, who claffes it with the Pheafant, and has VI fpecies. Gallus of Brifon, I. 165 . who enumerates V, but they are only varieties.

Bill, convex, fhort and ftrong.
XXXI. TURKEY.

Nostrils, open, pointed at one end, lodged in a membrane.
Tongue, floped on both fides towards the end, and pointed.
Heab and Neck, covered with a naked tuberofe flefh, with a long flefhy appendage hanging from the bafe of the upper mandible. Tail, broad, confifts of eighteen feathers, extenfible.

Unknown to none. Ex.
Native of North America only: Domefticated in moft countries. Meleagris of Linneus, and Gallo-paro of Brifon, I. 158. Linneus has III, Brifon II fpecies.
XXXII. PIN- BILL, convex, ftrong, and fhort; at the bafe a carunculated cere, TADO. in which the
Nostrils are lodged.
Head and Neck, naked, flightly befet with briftles.
A Horn, reflected and large, on the head.
Long Pointed Wattles, hanging from the cheeks.
Tail, fhort, pointing downwards.
Ex. Too common to need a reference.
Its native place Africa.
Numida of Linnetus, who has I. fpecies. Meleagris of Briffon, I. 176. who has likewife I. He calls it in French, La Peintade, a name I retain.
XXXIII. CU- Bill, convex, ftrong, and thick, the bafe covered with a cere, RASSO. often mounted by a large nob.
Nostrils, fmall, lodged in the cere.
Head, fometimes adorned with a creft of feathers, curling forwards.
Tail, large, ftrait.
Ex. Curaffo, and Cufhew-bird, Edw. CCXCV.
Inhabits South America.
Crax of Linnetus and Brifon, I. 296. But the laft claffes them with the Pheafant, and has VI fpecies, Linnetus III.
XXXIV. PEA- Bill, convex, ftrong, and fhort.

COCK. Nostrils, large.
Head, fmall, crefted.
Spurs on the legs.
G A L L I NACEOUS.

Tail, very long, broad, expanfible, confifting of a double range of feathers, adorned with rich ocellated fpots.
Common Peacock, frequent in moft parts. The Peacock Phea- Ex. fant, Edw. LXVII.
The native place India, $\mathcal{F} a p a n$, and Cbina.
Pavo of Linnetus, and Pbafianus of Brifon, I. 28 r . who reckons IV feecies of Peacocks, Linneeus III.

Bile, convex, fhort, and ftrong.
Nostrils, fmall.
TAIL, very long, cuneiform, bending downwaads.
Painted Pheafant, Edw. LXVIII.
Inhabits Afia and South America.
Pbafianus of Linnewu and Briffon I. 262. who has (including Peacocks and Curaffoas) XVI fpecies, Linnaus VI.

Bile, convex, ftrong, and fhort.
XXXV. PHEA.

SANT.

A naked fcarlet fkin above each Eye.
Nostrils, fmall, and hid in the feathers.
Tongue, pointed at the end.
Legs, ftrong, feathered to the toes; and fometimes to the nails. The toes of thofe with naked feet pectinated on each fide.
Grous, Br. Zool. fol. tab. M. 3. Br. Zool. I. tab. XLIII.
XXXVI, GROUS.

Inhabits the mountains or woods of Europe, northern and eaftern Afa, and North America.

Tetrao pedibus birfutis of Linnetes, who has IX fpecies. Lagopus of Briffon, I. 18 I. who has XII.
XXXVII. PAR- BILL, convex, ftrong, and fhort.
tridge. No naked fkin above the Eyes.
Nostrils, covered above with a callous prominent rim. Legs, naked, tetradactylous. Exception, two fpecies of Quails. Tail, fhort.

Ex. - Partridge, Br. Zool. fol. tab. M. V.
Inhabits the cultivated parts of the world.
Tetrao pedibus nudis of Linnesus, who has XI fpecies. Perdix of Briffon, who has XXI.
xXxVIII. Bill, fhort, upper mandible a little convex.
trumpeter. Nostrils, oblong, funk, and pervious.
Tongue, cartilaginous, flat, torn, or fringed at the end.
Legs, naked a little above the knees.
Toes, three before; one fmall behind, with a round protuberance beneath the hind toe, which is at a fmall diftance from the ground.

Ex. Grus Pfophia, Pallas fpicil. fafc. IV. tab. I.
Inhabits South America; lives in the woods; feeds on the fruit that fall down. Does not perch. Makes a ftrong noife with its mouth, which it anfwers by a different noife from its belly, as if it came from the anus. Lays many eggs.
Pfopbia of Linnews, from wopsw frepitum edo. Perdix of Brifon, 1. 227 . only I. fpecies. A beautiful fpecimen in the Leverian Museum.
G A L L I NA C E O U S.

Bile, a little convex.
XXXIX. BUS.

TARD.
Nostrils, open, oblong.
Tongue, floping on each fide near the end, and pointed,
Legs, long, and naked above the knees.
Toes, only three ; no back toe.
Bustard, Br. Zool. fol. tab. IV. Br. Zool. I. tab. XLIV. Ex.

Inhabits Europe, Afia, Africa, and Nerw Holland.
Otis of Linneus and Briffon, V. 18 . One has IV. the other III fpecies. De Buffon. Pliny tells us, that Otis was the Greek name, that the Spanifl was Sarda.

## ORDERIV. <br> C O L.U. M B I N E.

Bill, weak, flender, ftrait at the bafe, with a foft protuberant fubftance, in which the noftrils are lodged. Tongue, entire: Legs, fhort, and red: Toes, divided to the origin. Swift and diftant flight, walking pace. Plaintive note, or cooing, peculiar to the order. The male indates or fwells up its breaft in courtfhip. Female, lays but two eggs at a time. Male and female fit alternately; and feed their young, ejecting the meat out of their flomachs into the mouths of the nefllings. Granivorous, feminivorous. The neft fimple, in trees, or holes of rocks, or walls.
XL. PIGEON. There is only one genus of this order; it is therefore needlefs to repeat the characters.

Ex. A well known bird.
Inhabits all the Continents.
Columba of Linneus and Brifon, I. 67. Linnetus has XL fpecies, Briffon XLIV.


Fig.85Lce Pigeon grosse gorge. Histoire Nahurelle Fig.86.Le Pigeon grasse gorge orffo Fig. 87. Le Pigeon , polonois

## [ 25 ]

## OR D ER V.

## PASSERINE.

Bodies, from the fize of a Thrufh, to that of the golden-crefted Wren. The enliveners of the woods and fields; fprightly, and much in motion ; their nefts very artificial ; monogamous, baccivorous, granivorous, feminivorous, infectivorous; their ufual pace, hopping; of a few, running. Short flyers, except on their migrations only. All have three Toes before, one behind.

Bill, ftrait, depreffed.
Nostrils, guarded above by a prominent rim.
Tongue, hard and cloven.
Toes, the middle joined to the outmoft as far as the firf joint.
Stare, Br. Zool. fol tab. P. II. Br. Zool. I. tab. XLVI.
Sturnus of Linnetes and Briffon II. The firt has V fpecies, the laft four.

Bill, ftrait, obtufely carinated at top, bending a little at the XLII. THRUSH. point, and fightly notched near the end of the upper mandible.
Nostrils, oval and naked.
Tongue, nightly jagged at the end.
$\mathrm{H}_{2}$ Toes,

Toes, the middle joined to the outmoft as far as the firf joint; back toe very large.

Ex.
Fieldfare, Br. Zool. fol. P. II.
Blackbirds, Br. Zool. I. tab. XLVII.
Turdus of Linneus and Brifon II.
Linneus has YXVIII fpecies, Brifon LXIV.
XLIII. CHAT- Bill, frait, a little convex above, and bending towards the point; near the end of the upper mandible, a fmall notch on each fide.
Nostrils, hid in briftles.
Middee Toe, clofely connected at the bafe to the ontmoft.
Ex. The Pompadour, Edw. CCCXLI,
Ampelis of Linneus (from $\alpha \mu \pi \varepsilon \lambda o s$, a vine); becaufe the Bobemian Chatterer, the bird he places at the head of this genus, feeds fometimes on grapes. He reckons VII fpecies. The Coting of Brifon II. 339. an American name. He has X fpecies. Inhabits Europe and Amerisa.
xliv. COLY. Brle, convex above, ftrait beneath; very fhort and thick. Nostrils, fmall, placed at the bafe, and hid by the feathers. Tongue, not the length of the bill, laciniated at the end. Toes, divided to their origin.
Ex. Le Coliou, Briffon III. part I. tab. XVI. jg. 2.
Inhabits Africa.
Linnesus includes this among his Lowice. Brifon III. part I. 304. calls it Colius.


Purple Chatterer.

## P A S S E R I N E.

Bile, ftrong, and convex above and below, very thick at the bafe. Nostrils, finall and round.
XLV. GROSBEAK.

Tongue, as if cut off at the end.
Grofbeak, Br. Zool. fol. tab. U. Ex.
Pine Grofbeak, Br. Zool. I. tab. XLIX.
Inhabits every Continent.
Loxia of Linnetus including the Coccotbrauftes of Brifon, III. part I. 219. the Colius 304. the Pyrrbula 308. and Loxia or Crofs-bill 329. Linnews has XLVII fpecies; Brifon in ail XXXI. Loxia is the proper name of the Crofs-bill, from $\lambda_{0} \xi_{0}$, oblique.

Bile, ftrong, and conic, the fides of each mandible bending inwards; in the roof of the upper mandible, a hard knob, of ufe to break and comminute hard feeds.

Bunting, Br. Zool. fol. tab. W.
XLVI. BUNTING.

Ex.

Inhabits Europe, Afa, and America.
Emberiza of Linnetus and Briffon III. part I. 257. The firft has XXIV fpecies, the laft XV. The name is derived from Enibritz, or Emmeritz, its German name. Vide Gefner, av. 653.

Bill, conoid, a little inclining towards the point, upper XLVII. TANA. mandible nightly ridged, and notched near the end.

Red-breafted Blackbird, Edw. CCLXVII. and greater Bulfinch, Ex. LXXXII.

Inhabits Nortb and South America; moft numerous in the latter.

Tanagra of Linneus, and Tangara of Briffon III. part I. 3. Linnews reckons XXIV fpecies, Briffon XXX.
The name Tangara is Braflian.
XLVIII. FINCH. Bill, perfectly conic, fender towards the end, and very fharp pointed.

Goldfinch, Br. Zool. fol. tab. V.
Sparrows, Br. Zool. I. tab. XLI.
Inhabits all the quarters of the world.
Fringilla of Linnetus, who enumerates XXXIX fpecies. Paffer of Briffon III. pait I. 7 r. who has LXVII fpecies.
XLIX. FLY- Bill, flatted at the bafe, almoft triangular, notched at the end of CATCHER. the upper mandible, and befet with briftles. Toes, divided as far as their origin.

Ex. Flycatcher, Br. Zool. fol. tab. P. II.
Inhabits all the quarters of the world.
Mufcicapa of Linnews and Briffon, II. The firft has XXI fpecies; the laft XXXVIII.
L. LARK. Bill, ftrait, ीender, bending a little towards the end, fharp pointed.
Nostrils, covered with feathers and brifles.
Toncue, cloven at the end.

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\end{array}
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Toes, divided to the origin; claw of the back toe very long, and either ftrait, or very little bent.

Larks, Br. Zool. fol. tab. S. Br. Zool. I. tab. LV.
Inhabits Europe, Afia, Africa, and America.
Alauda of Linnesus and Brifon III. part II. 33:- Linnesus has XI fpecies, Briffon XII.

Bile, weak and flender.
LI. WAGTAIL.

Tongue, lacerated at the end.
Legs, nender.
Frequent the fides of brooks; their tails much in motion; their pace running; feldom perch; their neft on the ground.

Wagtails, Br. Zool. I. tab. LV.
Ex.
After the example of Scopoli, I feparate thefe, the genuine Motacillc, from the other foft-bill'd fmall birds, which he friles Sylvice. They are included among the Motacille of Linneus, and Ficedula of Brifon III. part II. 369.

Bill, flender and weak.
LII.WARBLERS.

Nostrils, fmall, funk.
Tongue, cloven.
Feet, the exterior toe joined at the under part of the laf joint to the middle toe.

Red-breaft, Br. Zool. fol. tab. S.
Ex.

Inhabits all parts of the world, except the Arctic: The moft melodious of the fmaller genera: Infectivorous, feminivorous, delight in woods and bufhes. Their pace hopping. Motacilla of Linneus, Ficedula of Brifon III. part II. 369. Linneus has XLIX féecies, Brifon LXXIII.
LiII. MANAKIN. Bill, fhort, ftrong, and hard, nightly incurvated.

Nostrils, naked.
Tongue.
Toes, the middle clofely united with the outmoft as far as the third joint.
Tail, fhort.
Ex Manakins, Edw. CCLXI.
Inhabits South America only.
Pipra of Linnetes, and Manacus of Brifon IV. 442. Linnetus enumerates XIII fpecies, Briffon XIII.
Pipra, a $\pi เ \pi \rho \alpha$, a certain bird, mentioned by Arifotle, bijt. an. lib. IX. C. I. Manacus from the Dutch, Manakin, the name they bear in Surinam.
LIV.TITMOUSE Bill, ftrait, a little compreffed, ftrong, hard, and fharp pointed. NosTrils, round, and covered with brifles reflected over them. Tongue, as if cut off at the end, and terminated by three or four briftes.
Toes, divided to their origin; back toe very large and ftrong.



## $P$ A $S \quad S \quad R I N E$.

Titmice, Br. Zool. fol. tab. W. Br. Zool. I. tab. LVII. a reftlefs Ex. fliting race; moft prolific; infectivorous, germinivorous, pagnacious.
Inhabit Europe and America.
Parus of Linnetus and Brifon III. part II. 539. Linneme has XIV. Briffon XVIII fpecies. Parus, from Pario, becaufe it lays many eggs.

Bile, fhort, broad at the bafe, fmall at the point, and a little LV.SWaLlow. bending.
Nostrils, open,
Tongue, fhort, broad, and cloven.
Legs, fhort.
Tail, forked; Wings, long.
Inhabits the univerfe, even as far as IIudfon's Bay.
Swallow, Br. Zool. fol. tab. Q. Br. Zool. I. tab. LVIII. Swift, Ex. much on wing, infectivorous, migratory or torpid during winter, twittering, forerunners of fummer.
Hirundo of Linneeus and Brifon II. 4.55. Linneús has XII fpecies, Briffon XVII.

Bill, very fhort, hooked at the end, and very flightly notched near the point.
LVI. GOAT. SUCKER.

Nostrils, tubular, and a little prominent.
Mouth, vafly wide: On the edges of the upper part, between the bill and the eyes, feven ftiff brifles.
Tongue, fmall, entire at the end.

Legs, fhort, feathered before as low as the toes. Toes, joined by a ftrong membrane as far as the firft joint. Claw of the middle toe broad-edged and ferrated.
Tail, confifts of ten feathers, and is not forked.
Inhabits Europe, Afia, and America.
Flies by night; infectivorous, fonorous, migratory. Has much of the nature of the Swallow.

Ex. Goatfucker, Br. Zool. fol. tab. R. Br. Zool. I. tab. LIX. Caprimulgus of Linnesus, Caprimulgus and Tette-chévre of Brifon II. 470. Linneus has only II fpecies, Brifon VI. Caprimulgus and Atro0ndns of the Ancients, from a vulgar notion that they fucked the teats of Goats.

## ORDER-VI.

## $\begin{array}{llllllllll}S & T & R & U & T & H & I & O & U & S .\end{array}$

Very great and heavy Bodies. Wings, imperfect; very fmall, and ufelefs for flight, but affiftant in running. Flefh coarfe, and hard of digeftion.

Struthious is a new coined word to exprefs this order; for thefe birds could not be reduced to any of the Linnetan divifions.

Bill, large, bending inward in the middle of the upper mandible, marked with two oblique ribs, and much hooked at the end.
Nostrils, placed obliquely near the edge, in the middle of the bill.
Legs, fhort, thick, feathered a little below the knees.
Toes, three forward, one backward.
Dodo, Edw. CCXCIV.
Inhabits the ines of France and Bourbon.
Didus of Linnevs, and Rapbus of Brifon, V. 14. only I. fpecies.

Ex

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S T R U T T H I O U S.
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LVIII. OSTRICH Bill, fmall, floping, a little depreffed. Small Wings, unfit for flight. Legs, long, ftrong, naked above the knees.

Ex. Oftrich and Caffowary, Wil. Orn. tab. XXV. Inhabits Afa, Africa, and the lower parts of South America. Strutbio of Linnetus and Brifon V. 3. III fpecies.

## DIV. II. WATER-FOWL.

## Order VII. With Cloven. feet.

VIII. With PINNATED FEET. IX. With WEBBED FEET.

Moft migratory, fhifting from climate to climate, from place to place, in order to lay their eggs, and bring up their young in full fecurity: the thinly inhabited north their principal breeding place ; returning at ftated periods, and, in general, yielding to mankind delicious and wholefome nutriment. All the Cloven-footed, or mere Waders, lay their eggs on the ground. Thofe with pinnated feet form large neits, either in the water, or near it. From the firft, we muft except the Heron and the Night-Heron*, which build in trees.

All the Web-footed fowl either lay their eggs on the ground, or on the fhelves of lofty cliffs; and none perch, except the Corvorant, Shugg, and one or two fpecies of Ducks.

* Night Raven, Raii Syn. av. 99.


## [ 36 ]

All the Cloven-footed Water-fowl have long necks and long legs, naked above the knees, for the convenience of wading in waters in fearch of their prey. Thofe that prey on fifh have ftrong bills. Thofe that fearch for minute infects, or worms that lurk in mud, have flender weak bills, and olfactory nerves of moft exquifite fenfe; for their food is out of fight.

As the name implies, their toes are divided, fome to their origin; others have, between the middle toe and outmoft toe, a fmall membrane as far as the firft joint. Others have both the exterior toes connected to the middlemoft in the fame manner; and, in a few, thofe webs reach as far as the fecond joint; and fuch are called Semipalmati.

Of the Web-footed fowl, the Flamingo, the Avofetta, and Courier, partake of the nature of both the Cloven and Web-footed orders; having webbed feet, long legs, naked above the knees, and long necks. The other Web-footed Water-fowl being very much on the element, have fhort legs, placed far behind, and long necks; and, when on land (by reafon of the fituation of their legs) an aukward waddling gate.

The make of the Cloven-footed Water-fowl is light, both as to fkin and bones; that of the Web-footed, ftrong.

## ORDER VII.

## CLOVEN-FOOTED.

Bile, long, broad, flat, and thin, the end widening into a circular form like a fpoon.
LIX. SPOON

BILL。
Nostrils, fmall, placed near the bafe.
Tongue, fmall and pointed.
Feet, femipalmated.
Spoon-bill, Wil. orn. tab. 52. Br. Zool. II. App.
Ex.
Inhabits Europe, South America, and the Pbilippine Iflands *.
Breeds in high trees; feeds on fifh, and water-plants; can fwim. Platalea of Linnetus, and Platea of Briffon V. 35 I. Each have III fpecies.

Bile, bending down at the point, with a horn, or with a tuft of LX.SCREAMER. feathers erect near the bafe of the bill.
Nostrils, oval.
Tongue.
Toes, divided almoft to their origin, with a very fmall membrane between the bottoms of each.

* Voy. de Sonnerat, 89.

Ex. Anhima Marcgrave 215.
Inhabirs South America.
Palamedea of Linneus, Anbima and Cariama of Briffon V. 518. I call it Screamer, from the violent noife it makes. Only two fpecies.
ixi. JABIRU. Bill, long, and large, both mandibles bending upwards; the upper, triangular.
Nostrils, fmall.
No Tongue? Marcgrave.
Toes, divided.
Ex. Jabiru guacu Marcgrave 200, 201.
Inhabits South America.
MyEtcria of Linneeus, from Murtng, a fnout. Ciconia of BriffonV. 37 I. Only one fpecies.
ixir. bOAT- Bill, broad, flat, with a keel along the middle, like a boat reverfed.
Nostrils, fmall, lodged in a furrow.
Tongue.
Toes, divided.
Ex. ] Tamatia Marcgrave 208. 209. Brown's Zool. 92. tab. XXXVI. Inhabits South America.
Gancroma of Linnews, from their feeding on Crabs, who has II fpecies; the Cocblearius of Brifon V. 20t. who has the fame number.
CIOVEN=FOOTED.

Bilu, long, ftrong, fharp pointed.
LXIII. HERON.

Nostrils, linear.
Tongue, pointed.
Toes, connected as far as the firft joint by a membrane ; back toe large.

Crefted Heron, Br. Zool. fol. tab. A. Ex.
Female Heron, Br. Zool. II. tab. LXI.
Inhabits every continent.
Ardea of Linnews. Ardea, Ciconia, and Balearica of Brifon V. 361. 391. 5 II. Linnetus has XXVI fpecies, Brifon LX.

Bile, ftrong, thick, ftrait, compreffed, the upper mandible com- Lxiv. UMBRE, pofed of feveral pieces.

Brown's Zool. go. tab. XXXV.
Inhabits Senegal and the South of Africa.
Scopus of Brifon, who has a fingle fpecies. He calls it Scopus, from $\sigma u x$, a flade; and Ombrette from the general deep brown of its plumage.

Bile, long, thick at the bafe, wholly incurvated. Eyes, lodged lxv. ibis. in the bafe.
Face, naked.
Nostriles, lińear.
Tongue, fhort and broad.
Toes, connected at the bafe by a membrane.

Ex. Red Curlew Catefby Carol. I. LXXXIV. White-headed Ibis, Ind. Zool. tab. X.
Inhabits Europe, Afia, and America.
Tantalus of Linnetus, Numenius of Brifon V. 3ir. Linnases has VII fpecies. Briffon mixes them with the genuine Curlews, and has in all XIV.
LXVI.CURLEW. Bili, long, flender, incurvated.

Face, covered with feathers.
Nostrils, linear, longitudinal, near the bafe.
Tongue, fhort, and flarp pointed.
Toes, connected as far as the firft joint by a ftrong membrane.
Ex. Curlew Br. Zool. II. tab. LXIII.
Inhabits Europe, America, the Pbilippine IJes, and New Holland. Scolopax of Linnetus," Numeirius of Brifon V. 3if. Linnewshas IV fpecies of genuine Curlews.
LXVII. SNIPE. Bile, two inches long and upwards; flender, ftrait, and weak. Nostrils, linear, lodged in a furrow. Tongue, pointed, flender. Toes, divided, or very nightly connected; back toe very fmall.

Ex. Woodcock, Br. Zool. II. tab. LXV.
Inhabits Earope, Afia, and America.
Scolopax of Linneus, Limofa and Scolopax of Brifon V. 26 I. 292.
Linneus reckons XIV fpecies, exclufive of the Curlews. Brifon XIII. Woodcock being the name of a fpecies inha-

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Tim



Litthe Sandpiper.
CLOVEN-FOOTED.
biting woods, I change it to the more comprehenfive one of Snipe, which fignifies a long bill.

Bile, ftrait, flender, and not an inch and a half long.
Nostrils, fmall.
Tongue, flender.
Toes, divided ; generally the two outmoft connected at bottom by a fmall membrane.

\section*{Purr Br. Zool. II. tab. LXXI.}
LXVIII. SAND. PIPER.

Inhabits all the quarters of the world; but in greateft plenty in the Nortbern.
Tringa of Linnetus; Vanellus, Arenaria, Glareola, and Tringa of Briffon V. 94. 132. 141. 177. including XXXV fpecies.

Bill, ftrait, as fhort as the head.
Nostrils, linear.
Tongue.
Toes. Wants the back toe.
Dotterel Br. Zool. II. tab. LXXIII.
Cbaradrius of Linnetus; Pluvialis of Brifon V. 43. and Himantopus and Oftralega 33. and 38. Linneeus has XII. Cb. Brifon XV. Pl. II. Himan.

Bill, long, compreffed, the end cuneated.
Nostrils, linear.
Tongue, fcarce a third the length of the bil.
Toes, only three ; the middle joined to the exterior by a ftrong membrane.
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\]

Ex. Sea-Pie, Br. Zool. fol. tab. D. 2. Br. Zool'. II. tab. LXXIV. Inhabits Europe, North America, and the eaftern coaft of New Holland. The bill calculated to raife limpets, oyfters, and other fhells from the rocks.
Hematopus of Linnesus, Oftralega and L'Huitrier of Briffon V. 38: Only one fpecies.
lxal. JACANA. Bill, flender, fharp pointed; thickeft towards the end; the bafe carunculated.
Nostrils, fhort, fub-ovated; placed in the middle of the bill.
Tongue.
Wings, armed on the front joint with a fharp, fhort fpur:
Toes, four on each foot, armed with very long and ftrait fharp pointed claws.
E. Spur-winged Water Hen. Edw. CCCLVII.

Parra of Linneus, Facana of Brifon V. 122. Linneus has has only III. genuine fpecies, Briffon V. I retain the Brafilian name Facana. Is not the Impios Parrex recinentis omen of Horace, which was probably fome fmall.bird. Vide Pliny, lib. X. c. 33.
LXXII. PRATIN- Bill, fhort, frong, ftrait, hooked at the end

COLE.
Nostrils, near the bafe, linear, oblique.
Tongue.
Toes, long, nender, bafe of each connected by a very finall membrane.
TAIL, forked; twelve feathers:
CLOVEN-FOOTED.

Pratincola, Kramer Aufr. 382.
Ex.
Inhabits Soutbern Europe.
Pratincola, or inhabitant of meadows, a name given it by Dr. Kramer, and adopted by me; placed by Linneus with the Hirundo, by Briffon among his Glareola.

Bile, flender, a little compreffed, and nightly incurvated.
Nostrils, fmall.
Tongue, rough at the end.
Body, much compreffed.
TAIL, very fhort.
Water-Rail, Br. Zool. II. tab. LXXV.
LXXIII, RAIL,

Inhabits Europe, Afia, and America.
Rallus of Linnetus, who places it among others very different; fuch as the Land-Rail, \&cc. Briffon calls the genus Rallus, but mixes with it others of another genus.

Bile, ftrong, thick, a little convex: upper of the upper mandible lodged in a corneous fheath. Sometimes elevated and open in front : at other times clofely applied to the bill; reaching beyond the edges of the mandible.
Nostrils, fmall : juft appearing out of the fheath.
Orbits, naked, granulated.
Wings, armed at the fecond flexure with a hard knob.
Legs and Toes, thick, gallinaceous. Toes edged with a thick membrane. The middle toe connected to the next

CLOVEN-EOOTED.
by a web, as far as the firft joint. Claws, blunt, guttered below.
Tongue, fagittal, blunted at the point.
A new genus. Frequents watry places in New Zeland and Statenland.
LXXV. GALLI- Bill, thick at the bafe, floping to the point; the upper mandible NULE. reaching far up the forehead, and not corneous.
Body, compreffed.
Wings, fhort and concave.
Toes, long, divided to their origin.
Tail, fhort.
Ex.
Water-Hen, Br. Zool. fol. tab. L. I. Br. Zool. II. tab. LXXVII. Inhabits Europe, Afia, and America.
Fulica of Linnetus, Gallinula VI. and Porpbyrio V. 522. of Briffon, who has III fpecies of the firft, and X of the laft. In Bill and Legs, the Land-Rail agrees with this genus; but, with us, differs in its manners, by refiding in dry places. But, as it migrates at approach of winter, it may, in warmer climates, during the feafon, inhabit fenny tracts, to which the form of its legs are adapted.

\section*{[ 45 ]}

\section*{OR D ER VIII.}

\section*{With PINNATED FEET.}

Bill, ftrait, flender.
Nostrils, minute.
Tongue.
Body and Legs, in every refpect formed like the Sand-piper.
Toes, furnifhed with fcalloped membranes.
Scallop-toe'd Sand-piper, Br. Zool. fol. tab. E. Br. Zool, II. tab. Ex, LXXVI.

Its manners, \&c. unknown.
Inhabits Europe and North America.
Linneus places it among the Tringre; Brifon very judiciounly forms a new genus, under the name of Pbalaropus, from the fcallops on the toes, like the \(\varphi\) a \(\lambda a \rho \stackrel{s}{ }\), or Coot.

Bill, fhort, ftrong, thick at the bafe, noping to the end; the LXXVII. COOT. bafe of the upper mandible rifing far up the forehead; both mandibles of equal length.

Nostrils, incline to oval, narrow, fhort. Tongue. Body, comprefled. Wings, fhort. Toes, long, furnifhed with broad fcalloped membranes. Tail, fhort.

Ex. Coot, Br. Zool. fol. tab. F. Br. Zool. II. tab. LXXVII. Inhabits Europe, Afia, and Africa.
Continues much on the water, makes a large neft of water-plants, lays fix or feven eggs. In winter, ofttimes are feen in great flocks on arms of the fea.
Fulica of Linneus, and Briffon VI. 23. Linnewes has only II fpecies, for he mixes other birds with them. Briffon has II.

ExXVIII. Bill, ftrong, flender, fharp pointed.
grebe. Nostrils, linear.
Tongue, nightly cloven at the end.
Body, depreffed. Feathers, thick-fet, compact, and very fmooth and glofly.
Tail, none. Wings, fhort.
Legs, placed very far behind, very thin, or much compreffed; doubly ferrated behind.
Toes, furnifhed on each fide with a broad, plain membrane.
Ex. Grebe, Br. Zool. fol. tab. K. Br. Zool. II. tab. LXXVIII.
Congenerous birds, found in moft countries; north as high as Hudfon's-Bay, and fouth as far as lat. 48. 30. and long. 58. 7. eaft.
eaft *. Linnexu mixes his birds of this genus with web-footed birds, fuch as Divers and Guillemots, by the general name of Colymbi. Brifon V.I. 33. very judicioully feparates them, and has under the fame name XI fpecies.
* Cook's Voy, i. 48. Forfer's i. 115.

\section*{\(\left[\begin{array}{ll}48\end{array}\right]\)}

\section*{OR D ER IX.}

\section*{W E B - F O O T E D.}

\author{
With L O N G LEGS.
}
LXXIX. AVO- Bill, long, fender, very thin, and bending confiderably upwards. SET. Nostrils, narrow and pervious.
Tongue, fhort.
Feet, palmated; the webs deeply femilunated between each toe; back toe very fmall.

Ex: Avofetta, Br. Zool. fol. tab. G. Br. Zool. II. tab. LXXX. Inhabits Europe, Nortb America, and the weftern coaft of New Holland *.
Recurviroftra of Linnesus, Avofetta of Brifon VI. 537. Two fpecies.

ZXXX. COU. Bill, fhort, ftrait.
RIER. Nostrils. Tongue. Legs, long. Thighs, fhort. Feet, palmated; has a back toe. * Dampier, iii. 85.
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W \quad E \quad B-F O C \quad T \quad E \quad D .
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Trochilus, vulgo Corrira Aldr. av. III. 288. Wil. orn. tab. LX. Ex. Inhabits Italy.
Corrira of Brifon VI. 542. Only one fpecies, and that probably never obferved fince the days of Aldrovandus; who is the only writer who feems to have feen it.

Bill, thick, large, bending in the middle, forming a fharp angle,
LXXXI. FLAM-

MANT. the higher part of the upper mandible carinated; the lower, compreffed. The edges of the upper mandible fharply denticulated; of the lower, tranfverfely fulcated.
Nostrils, covered above with a thin plate, pervious, linearly longitudinal.
Tongue, cartilaginous, and pointed at the end ; the middle mufcular, bafe glandular, on the upper part aculeated.
\(\mathrm{N}_{\mathrm{fc}}\), very long.
Legs and Thighs, of a great length.
Feet, webbed; the webs extend as far as the claws, but are deeply femilunated.
Back Toe, very fmall.

Elamingo, Cateßy Carol. I. LXXIII.
Ex.
Inhabits South America, Africa, and rarely the South of Europe.
Pbenicopterus of Linnexus. Only one fpecies.

\section*{\%}

\author{
With SHORT LEGS.
}

IXXXII. ALBA Bill, ftrong, bending in the middle, and hooked at the end of
TROSS. the upper mandib!e. That of the lower mandible abrupt, and the lower part inclining downwards.
Nostrils, opening forward, and covered with a large convex guard.
Tongue.
Toes, no back toe.
Ex. Albatrofs, Edw. LXXXVIII.
Inhabits the inands and feas within the Tropics, and as far fouth as lat. 67. 15. long. 39. 35. eaft *. Two or three fpecies have been added to this genus.
Diomedea exulans of Linnews, Albatrofs of Briffon VI. 127.
LXXXIII. AUK. BILl, ftrong, thick, convex, compreffed.

Nostrils, linear, placed near the edge of the mandible.
Tongue, almoft as long as the bill.
Toes, no back toe.
Ex. Puffin, Br. Zool. fol. tab. H.
Great Auk, Br. Zool. II. tab. LXXXI.
Inhabits the northern parts of Europe, Ajia, and America; gregarious in general ; lays only one egg; thefe, the Grebe, Divers, and Pinguins, while on land, feldom move much.

Alca of Linnetus，Fratercula and Alca of Brifon VI．81． \(85^{\circ}\) Linnews has V．fpecies，Briffon IV．viz．I，of the Fr，or Puffin， III of the Alca，or Auk．

Bill，flender，ftrong，pointed，the upper mandible nightly bend－ ing towards the end；bafe covered with fhort foft feathers．

LXXXIV．GUIL．

Nostrils，lodged in a hollow near the bafe．
Tongue，符放er，almoft the length of the bill．
Toes，no back toe．
Guillemot，Br．Zool．fol．tab．H．3．
Leffer Guillemot，Br．Zool．II．tab．LXXXII．
Inhabits the fame places with the former，and lays only one egg．
Linneevs claffes this genus with the Colymbi．The Uria of Briffon VI． 70 ，who has IV．fpecies．

Bris，ftrong，ftrait，pointed，upper mandible the longeft edges LXXXV．DIVER． of each bending inwards．
Nostrils，linear ；the upper part divided by a fmall cutaneous appendage．
Tongue，long and pointed，ferrated at each fide near the bafe．＂
Legs，very thin and flat．
Toes，the exterior the longeft；the back toe fmall，joined to the interior by a fmall membrane．
TAIL，fhort ；confifts of twenty feathers．
Great Northern Diver，Br．Zool．fol．tab．K． 2. Ex． Imber，Br．Zool．vol．II．tab．LXXXIV．
Inhabits the north of Europe，Afia，and America．

Colymbus of Linneus, and Mergus of Briffon VI. i04: The laft has VI fpecies. Linnesus mixes with this genus Gribes and Guillemots.
LXXXVI. SKIM- Bill, greatly compreffed; lower mandible much longer than the MER. upper.
Nostrils, linear and pervious.
Tongue.
Toes, a fmall back toe.
Tail, a little forked.
Ex. Cutwater, Catefby Carol. I. tab. XC.
Inhabits India and America.
Rynchops of Linnetus. Rygchopfalia of Briffon VI. 223. I. fpecies.
Rynchops, from \(\dot{\rho} u \gamma \chi \circ s\), a bill, and romesiv, to cut; the upper mandible being as if cut. I call it Skimmer, from the manner of its collecting its food with the lower mandible, as it flies along the furface of the water.
LXXXVII.TERN Bill, ftrait, flender, pointed.

Nostrils, linear.
Tongue, flender and fharp.
Wings, very long.
Toes, a fmall back toe. Tail, forked.

Ex. Great Tern, Br. Zool. fol. tab. L*。 Little Tern, Br. Zool. II. tab. XC.
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\]

Clamorous, much on the wing, gregarious, lays four eggs on the ground.
Inhabits Europe, and America, North and South.
Slerna of Linnetus, and Brifon VI. 202. Linnetus has VII fpecies, Briffon the fame.
\(B_{\text {ILL }}\), ftrong, ftrait, but bending down at the point; on the under part of the lower mandible an angular prominency.
Nostrils, oblong and narrow, placed in the middle of the bill.
Tongue, a little cloven.
Body, light; Wings, long.
Lecs, fmall, and naked above the knees; back toe fmall.
Great Black and White Gull, Br. Zool. fol. tab. L.
Winter Mew, Br. Zool. II. tab. LXXXVI.
An univerfal genus; much on the wing, clamorous, hungry, pifcivorous, carnivorous, gregarious; lays four or five eggs, generally on high cliffs.
Larus of Linnetus, and Larus and Stercoraria of Briffon VI. 153. The firft has XI fpecies, the laft XVIII.

Bill, ftrait ; but hooked at the end.
LXXXIX. PETREL.

Ex.

Stormy Petrel, Br. Zool. IV. tab. XCI.

Inhabits all parts of the ocean; but the fpecies moft numerous in the high fouthern latitudes, as the Auks are in the northern. Many have the faculty of fpurting an oily liquid out of their ftomachs.
Procellaria of Linnesus, Procellaria and Puffinus of Brifjon. LinNews has VI fpecies, Brifon VII.
xc. mergan- Bill, nender, a little depreffed, furnifhed at the end with a SER. crooked nail. Edges of each mandible very fharply ferrated. Nostrils, near the middle of the mandible, fmall and fub-ovated.. Toncue, fender. Feet, the exterior toe longer than the middle.

Ex. Goofander, Br. Zool. fol. tab. N *. Red-breafted Goofander, Br. Zool. II. XCIII. Great divers, feed on fifh. Mergus of Linnewis, and Merganfer of Brifon, VI. 230. Linnetus has VI fpecies, Briffon VII. The name, Merganfer, or Diving-Goofe.
Inhabits the North of Europe, and North America.
XCI. DUCK. Bile, ftrong, broad, flat, or depreffed ; and commonly furnifined. at the end with a nail. Edges marked with fharp Lamell.c.
Nostrils, fmall, oval.
Tongue, broad, edges near the bafe fringed.
Feet, middle toe the longeft.

\section*{Ex. Br. Zool. II. tab. XCVII.}

Found in all climates.


Spanish Duak.


Anas of Linneus, who has XLV fpecies. Brifon divides this genus into Anfer and Anas; has XVI of the firft, and XLII of the fecond.

Bule, frong, frait, bending a little towards the point.
XCII. PINGUIN.

Nostrils.
Tongue, covered with ftrong fharp fpines, pointing backwards.
Wings, very fmall, pendulous, ufelefs. for flight; covered with mere flat fhafts.
Body, covered with thick fhort feathers, with broad fhafts, placed as compactly as fcales.
Legs, fiort and thick, placed quite behind.
Toes, four flanding forward; the interior loofe, the reft webbed.
Tail, very fiff, confifting only of broad fhafts.
Patagonian Pinguin, Pb. Tr. vol. LVIII. 9r. tab. V.
Ex.
Inhabits an ine near the Cape of Good Hope, on the coarts of Nerw Guinea \({ }^{*}\), the ife of Defolation, fouth of the Cape, the fouthern parts of South America, and the feas among the ice as high as South, lat. 64. 12. long. 38. I4. eaft \(\dagger\). Lives much at fea, The wings act as fins. On land burrows, Are analogous to Seals.
Diomedea demerra and Pbaetbon demerfus of Linnewus. Spbenicus and Catarraciis of Brifon. VI. 96.and ro2. I call it Pinguin, the name. firt given it by the Dutch voyagers; a Pinguedine.

\footnotetext{
* Voy. de Sonnerat. \(179^{\circ}\).
+ Cook's Voy. i. \({ }^{8}\).
}
\[
W E B-F O O C \quad E \quad D .
\]
XCIII.PELICAN. Biel, long and frait; the end either hooked or floping.

Nostrils, either totally wanting, or fmall, and placed in a furrow, that runs along the fides of the bill.
Face, naked.
Gullet, naked, and capable of great diftenfion.
Toes, all four webbed.
Ex. Pelican, Edw. XCII.
Corvorant, Br. Zool. fol. tab. F. 1. Br. Zool. II. tab. CII.
Congenerous birds, inhabit all parts of the globe.
Pelicanus of Linneeus, who has VIII fpecies. Briffon divides. this genus into Sula, Pbalarocorax, and Onocrotalus, and forms out of them XII fpecies, VI. 494. 51 I . and 519 . All feed on fifh. The Corvorants. fit, and often breed in trees.
xCIV. TROPIC. Bill, compreffed, flightly floping down. Point fharp. Under mandible angular.
Nostrils, pervious.
Tongue.
Toes, all four webbed.
Tail, cuneiform: Two middle feathers extending for a vaft length beyond the others.

Ex. Tropic Bird, Edw. CXLIX.
Inhabits within the Tropics. Flies very high.
Pbaethon of Linneus, from the great heighth it afpires to. Lep.turus of Briffon, from the flendernefs of its tail, VI. 479.

Bile,
- NVOrtitd LVפIqA



PELECAN.
W E B - FOOTED.

Bill, long, Arait, Iharp pointed.
XCV, DARTER.
Nostrils.
Tongue.
Neck, of a great length.
\(F_{\text {ace }}\) and Gullet, covered with feathers.
Toes, all four webbed.
Black-bellied Anbinga, Ind. Zool. tab. XII.
Exo
Inhabits Guinea, Ceylon, and South America. Darts out its head either at its food, or at paffengers that go by; whence the name.
Plotus of Linnesus, Anbinga of Briffon, VI. 476.

The intention of giving a plate to every genus of this work, was entirely fuperfeded by the confideration of a New Ornithology, undertaken by Mr. Fohn Latbam, of Dartford. In that comprehenfive attempt, every fpecies of bird will be fully defribed; and one or more figures will be given, explanatory of each genus: Mr. Latbam's knowlege of the fubject, and the labor he has beftowed on it, will doubtlefsly render it worthy of the attention of the public.

M2 EXPLA-

\section*{[ 59\(]\)}

\section*{EXPLANATION}

> OFTHE
\(\begin{array}{llllll}\mathbf{P} & \mathbf{L} & \mathbf{A} & \mathbf{T} & \mathbf{E} & \mathbf{S} .\end{array}\)

Genus I. Falcon.
Crested Hobby.
F. with black head, cheeks, and hind part of neck. Head flightly crefted. Back, and coverts of wing, black. Primaries and tail, of the fame color, marked with numerous bars of white. Throat, white. Breaft, thighs, and vent, ferruginous. Legs, yellow. Size of the Englif/ Hobby. From Surinam. Preferved in the Britijh Museum.

> Genus V. PARROT.
White-collared Parrot.
P. with a red bill; blue head, cheeks, and chin; green neck, back, and wings. Neck half furrounded with a white collar, paffing over the upper part towards the throat. Upper part of the breaft
breaft of a fine red; the lower, yellow: belly, blue: thighs, yellow and blue: tail, cuneated; yellow beneath. Inhabits the inles of the Eaft Indies?
III.

Genus XXII. Jacamar.
Cupreous Jacamar, fig. i.
Alcedo Galbula, Lin. Syft. 182.
J. with a black bill: whitifh throat: head, cheeks, wings, and tail, of a bluifh green : breaft, belly, and back, of a variable copper color, very rich and gloffy.
Varies in fome refpects from that figured by Mr. Edwards, tab. XXXIII. in having lefs green on the back; fo probabiy is of another fex.
Size of a Lark.
Inhabits Surinam, and other parts of Soutb America.
Yellow-Cheeked Creeper.

Cr. with green head, back, wings, and tail: cheeks and throat, deep yellow: breaft and fides of a yellowifh green, marked with bluif fpots: belly, yellow.
Size, inferior by half to the Englifh Creeper.
Inhabits Surinam.

\section*{THE PLATES. \\ Genus XXIII. KINGFISHER. V.}
Red-Headed Kingfisher.
K. with a red bill; near the bafe of the upper mandible, a white fpot: head, and upper part of the neck, of an orange red: from each eye, towards the back, extends a purple line, terminating in a white fpot; and on the inner fide of that, one of black: chin, white: upper part of the back, a rich blue: the lower, light purple: coverts of wings, black, edged with blue: primaries, black : breaft and belly, yellowifh white : back, orange: legs, red.
Size, leffer than the common Kingfifher.
Inhabits India...
\[
\begin{gathered}
\text { Genus XXV. Tody. } \\
\text { Green Tody, fig. I. } \\
\text { Todus Viridis, Lin. Syf. 178.. }
\end{gathered}
\] VI.
T. with head, back, wings, and tail, of a fine green: throat, a rich crimfon: breaft and belly, of a pale yellow: vent, deeper. Size of a Wren. The Green Sparrow of Mr. Edwards, tab. CXX.

Inhabits famaica, and the hot parts of Amerisa.

\section*{LXPLANATIONOF}

\section*{BROWN TODY, fig. 2.}
'T. with the whole upper part of a ferriginous brown: the coverts of the wings, croffed with a dufky bar: lower part of the body, olive, fpotted with white : tail, ferriginous.
Size, larger than the former.
Inhabits the hot parts of America.
VII.
VIII.

Genus XXVI. Bee-EAter.
Indian Bee-Eater.
\[
\text { Merops Viridis, Lin. Syft. i } 82 .
\]
B. with head, and lower part of neck, of a fine light blue, bounded below by a line of black: a black line paffes from bill through the eyes to the hind part of the head: hind part of head and neck, of an orange red: upper part of back, coverts of wings, fecondaries, and tail, green : the middle part of the fecondaries, of a reddifh orange: lower part of back, of a light blue: breaft and belly, of a yellowifh green: tail, long; two middle feathers two inches longer than the others, and appear like mere fhafts.
Nearly the fize of a Redwing Thruih. Inhabits India.

Genus XXIX. Honey-Sucker.
Yellow-fronted Honey-Sucker, fig. 1 .
H. with a yellow forehead: green body and coverts of wings: black primaries and tail.

Purple-crowned Honey-Sucker, fig. 2.
H. with a purple crown: green throat: rich deep blue collar round the whole lower part of the neck: back, green: wings, and forked tail, of a deep purple.

Orange-headed Honey-Sucker, fig. 3 .
H. with an orange head: yellow throat and breaft : deep brown belly and back: purple wings: bright ferruginous tail.
All very minute. Inhabitants of the hot parts of America.

\section*{Genus XLIII. CHATTERER。 Cotinga. \\ Ampelis Cotinga, Lin. Syft. 298.} IX

Ch. with head and upper part of the body, and coverts of wings; of a moft fplendid blue, deepeft on the crown: belly and vent, of the fame color: under fide of the neck and breaft, of a lovely purple: in fome the breaft is croffed with a band of the fame blue with the upper part: primaries and tail, dufky.
Size of a Stare.
Inhabits Surinam, and other hot parts of South America.

\section*{EXPLANATIONOF}
X.

Genus LIII. Manakin.
Crested Manakin, fig. i.
Pipra Rupicola, Lin。Syf. 338 .
M. with a whitifh bill: great round upright creft, of a fine orange color, croffed near the end of each feather with a darker line: neck, back, and whole under fide, of the fame vivid color. The feathers on the back end fingularly, as if they had been cut off: and fome of the feathers on the fides of the back, are loofe and pointed. The primaries brown, marked with a white line: tail fhort, partly brown, partly orange.
Size of a Turtle Dove. Inhabits Surinam.

Golden-headed Manakin, fig. 2. Pipra Erythrocephala, Lin. Syf. 339.
M. with a rich yellow head: fcarlet fhoulders and thighs: black body, wings, and tail.
Size of a Wren. Inhabits Surinam.
XI.

\section*{Genus LXVI. Curlew.}
\[
\text { PyGMYCURLEW, fig. } 1 .
\]
C. with the head, back, and coverts of the wings; mixed with brown, ferruginous, and white: primaries, dufky, edged with white:
white : breaft and belly, and rump, white: tail, dulky: the exterior feathers edged with white: bill and legs, black.
Size of a Lark.
Inhabits Holland. Sent to me by Doctor L. Theodore Gronovius.

\section*{Genus LXVIII. SANDPIPER. \\ XII.}

Littee Sandpiper, fig. 2. Br. Zool. II. No. 207.
S. with head, upper part of the neck, back, and coverts of the wings, brown, edged with black, and pale rufty brown: breaft and belly, white.
Leffer than a Hedge Sparrow.
Inhabits Europe and North America.

\section*{Genus XCI. D иск.}
XIII.

Spanish Duck.
Anas Vindila, Lin. Syft. 205.
D. with forehead, cheeks, chin, and hind part of the head, of a fnowy whitenefs: crown, black : neck, furrounded with a black collar : back and breaft, bright ferruginous, croffed with narrow dufky lines: wings, pale brown, without a fpeculum: belly, whitifh brown, fpotted with black: tail, cuneiform, black: legs, bluifh.

Size of a Wigeon. Whiftles like one.
Inhabits Spain and Barbary. Prefented to me by Sir Hugh Williams, baronet.
XIV.

Genus XCII. Pinguin.
Patagonian Pinguin, Pb. Tr . Vol. LVIII. 9i.
P. with a flender bill, flightly bending: head, hind and fore part of the neck, dufky : each fide of the neck marked with a narrow ftripe of bright yellow, pointing from the head to the breaft, uniting beneath the dark color of the front of the neck, and fading away into the pure white of breaft and belly: whole back, of a deep cinereous color, marked with numerous fmall cærulean fpots: outfide of wings, black: infide, white: tail and legs, black.
Length, about three feet three inches. Weight, forty pounds *. Inhabits Falkland Iflands, Nere Georgia, the inland of Defolation, (vifited by Captain Cook, in his laft voyage, fouth lat. \(48 \frac{1}{2}\). eaft longitude from Greenwich 70.) and New Guinea.
The meafurement of that which I defcribed in the Philofophical Tranfactions, is faulty, being taken from a ftuffed fkin too much diftended. I correct it here, and add a figure of the bird, taken from life.

\footnotetext{
* E'orffer's Voy. ii. 528. To the places where the Leonine Seals are found, p. 535 of my Hiff. Quad. add Staten-land, and the illand of Defolation.
}

> THE PLATES.

Genus XCIII. Pelecan. XV.
Common Pelecan.
Pelecanus Onocratalus, Lin。Syf. \(215^{\circ}\)
P. with the head nightly crefted: plumage, white, tinged with a fine bloffom color: the primaries, black: legs and feet, purplifh: webs, dufky.
Size, fometimes double that of a Swan : bill, twenty inches long : extent of wings, eleven feet eight, Englifb *.
Inhabits the Danube, in its paffage through Hungary: abounds in Africa and Afa, in feveral parts: numbers about the Cafpian fea; and it is not unknown on lake Baikal. Found alfo of a vaft fize in Nerw Holland.

\section*{Genus the fame.}
\(\mathrm{XVI}_{0}\)
Frigat Pelecan.
Pelecanus A Quilus, Lin. Syft. 216.
P. with a flender bill, hooked at the end: under the lower mandible, a vaft naked fcarlet pouch, like a bladder, extending down the whole front of the neck. The ufes of this pouch to this and the former fpecies, is to convey food to their young : the common Pelecan, which often breeds in arid deferts, makes it a vehicle for water for its young brood. Color of the plumage of the male, a deep brown, or chocolate; the coverts of the wings lighteft, and tinged with ruft color: the longeft feather in the tail,
nineteen inches long: the middle, or fhorteft, only eight: breaft of the female, white.
Length, three feet.
Inhabits Afcenfion Iland, the Weft Indies, fome of the Indian Iflands, and Eafter Ifland, in the fouth feas: hovers in the air with the gentle motion of a kite : feeds on fifh : darts on its prey as the fifh fwim near the furface, but does not alight on the water: will affault other birds, and make them caft up their prey; and then catch it in the fall *.
* Dampier. Campearhy Voy. 25.
\[
\mathrm{E} R \mathrm{R} A \mathrm{~T} \mathrm{U} \text { M. }
\]


\(\mathbb{N} D \mathbb{E} \mathbb{X} \mathbb{E}\) lo the
ORNITHOLO GTE of the COMTNE DE BUFHON arad the
PTANCHES S IENLUMININES.


Printed for BENJITWHTIE \& SON.
MTDCCLXXXVI.
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1786
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[^0]:    * By M. Barrere of Perpignan in 1745, Mr. Klein in 1750, Mr. Moebring in 1753, M. Brifon in 1760, and by Linncus at different periods. Mr. Ray formed (in conjunction with Mr. WilquGHBy) his tables of animals, in the winter 166\%, Eor the ule of Bifhop Wilkin's real character.

